

SEQUENCE LISTING

<110> Frudakis, Tony N.
 Reed, Steven G.
 Smith, John M.
 Misher, Lynda E.
 Dillon, Davin C.
 Retter, Marc W.
 Wang, Aijun
 Skeiky, Yasir A. W.
 Harlocker, Susan L.
 Day, Craig H.
 Li, Samuel X.
 Deng, Ta

<120> COMPOSITIONS AND METHODS FOR THE THERAPY
 AND DIAGNOSIS OF BREAST CANCER

<130> 210121.419C13

<140> US

<141> 2002-02-20

<160> 428

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1

```

ttagagaccc aattgggacc taattgggac ccaaatttct caagtggagg gagaactttt 60
gacgatttcc accggtatct cctcgtgggt attcagggag ctgcccagaa acctataaac 120
ttgtctaagg cgattgaagt cgtccagggg catgatgagt caccaggagt gtttttagag 180
cacctccagg aggcttatcg gatttacacc ccttttgacc tggcagcccc cgaaaatagc 240
catgctctta atttggcatt tgtggctcag gcagccccag atagtataag gaaactccaa 300
aaactagagg gattttgctg gaatgaatac cagtcagctt ttagagatag cctaaaaggt 360
ttt

```

<210> 2

<211> 121

<212> PRT

<213> Homo sapiens

<400> 2

```

Leu Glu Thr Gln Leu Gly Pro Asn Trp Asp Pro Asn Phe Ser Ser Gly
  1           5          10         15
Gly Arg Thr Phe Asp Asp Phe His Arg Tyr Leu Leu Val Gly Ile Gln

```

```
<210> 3
<211> 1080
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 681, 685, 706, 720, 741, 752, 758, 780, 789, 824, 840, 859,
866, 884, 890, 905, 917, 926, 930, 951, 957, 959, 962, 974,
980, 982, 988, 995, 996, 1007, 1010, 1025, 1040, 1051, 1052,
1056, 1057, 1078
<223> n = A,T,C or G

<400> 3
tcttagaatc ttcatacccc gaactctttgg gaaaacttta atcagtcacc tacagtctac 60
caccctattta ggaggagcaa agctacctca gctcctccgg agcgcgttta agatccccc 120
tcttcaaagc ctaacagatc aagcagctct ccggtgcaca acctgcgccc aggtaaatgc 180
caaaaaaggt cctaaaccca gcccaggcca ccgtctccaa gaaaactcac caggagaaaa 240
gtgggaaatt gactttacag aagtaaaacc acaccgggct ggggtacaaat accttctagt 300
actggtagac accttctctg gatggactga agcatttgct accaaaaacg aaactgtcaa 360
tatggtagtt aagtttttac tcaatgaaat catccctcga cgtgggctgc ctgttgccat 420
agggctctgat aatggaacgg ccttcgcctt gtctatagtt taatcagtca gtaaggcggt 480
aaacattcaa tggaagctcc attgtgccta tgcaccaga gctctgggca agtagaacgc 540
atgaactgca ccctaaaaaa acactcttac aaaattaatc ttaaaaaaccg gtgttaattg 600
tgtttagtctc ctcccttag ccctacttag agttaagggtg cacccttac tgggctgggt 660
tctttacctt ttgaaatcat ntttnggaag gggctgccta tcttttctta actaaaaaan 720
gcccat ttg caaaaatttc ncaactaatt tntacgtnc tacgtctccc caacagggtan 780
aaaaatctnc tgcccttttc aaggaaccat cccatccatt cctnaacaaa aggccctgccn 840
ttcttccccc agttaactnt tttttnttaa aattcccaaa aaangaaccn cctgctggaa 900
aaacncccc ctccaanccc cggccnaagn ggaaggttcc cttgaatccc nccccncna 960
anggccggga accnttaaan tngttccngg gggtnnggcc taaaagnccn atttggtaaa 1020
cctanaaatt ttttcttttn taaaaaccac nntttntttt ttcttaaaca aaaccctntt 1080

<210> 4
<211> 1087
<212> DNA
<213> Homo sapiens
```

<220>

<221> misc_feature

<222> 559, 574, 576, 581, 582, 587, 589, 593, 594, 609, 627, 640,
659, 668, 672, 677, 691, 713, 714, 732, 741, 812, 813, 823,
825, 829, 838, 845, 849, 852, 855, 856, 859, 874, 876, 877,
892, 902, 907, 916, 917, 938, 950, 951, 952, 953, 960

<223> n = A,T,C or G

<221> misc_feature

<222> 965, 974, 976, 978, 982, 996, 1005, 1012, 1049, 1058, 1073,
1074, 1082, 1084, 1086

<223> n = A,T,C or G

<400> 4

```
tctagagctg cgcctggatc cgcgcacagt gaggagacct gaagaccaga gaaaacacag 60
caagtagggc ctttaaacta ctcacctgtg ttgtcttcta atttattctg ttttattttg 120
tttccatcat ttttaagggt taaaatcatc ttgttcagac ctcagcatat aaaatgaccc 180
atctgtagac ctgaggctcc aaccataccc caagagttgt ctggttttgt ttaaattact 240
gccaggtttc agctgcagat atccctggaa ggaatattcc agattccctg agtagtttcc 300
aggttaaaat cctataggct tcttctgttt tgaggaagag ttctgttcag agaaaaacat 360
gattttggat ttttaacttt aatgcttgtg aaacgctata aaaaaaattt tctacccta 420
gctttaaagt actgttagtg agaaattaaa attccttcag gaggattaaa ctgccatttc 480
agttacccta attccaaatg ttttggtggt tagaatcttc tttaatgttc ttgaagaagt 540
gttttatatt ttcccatcna gataaattct ctcnncctt nntttntnt ctntttttt 600
aaaacggant ctgctccgt tgtccangct gggaattttt ttttgccaa tctccgctnc 660
cttgcaanaa tntgcntcc caaaattacc ncctttttcc cacctccacc ccnnggaatt 720
acctggaatt anaggccccc ncccccccc cggctaattt gtttttgttt ttagtaaaaa 780
acgggtttcc tgtttttagtt aggatggccc anntctgacc centnatent cccctcngc 840
cctcnaatnt tnggnntang gcttaccccc ccngnnggt tttcctccat tnaaattttc 900
tntggantct tgaatnncgg gttttccctt ttaaaccnat tttttttttt nnnccccan 960
tttncctcc cccntntnta anggggggtt cccaanccgg gtcnccccc angtccccaa 1020
tttttctccc cccctctt ttttctttnc cccaaaantc ctatcttttc cttnaaatat 1080
cnantnt 1087
```

<210> 5

<211> 1010

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 311, 315, 318, 339, 341, 347, 361, 379, 391, 415, 417, 419,
424, 430, 433, 454, 463, 465, 467, 476, 497, 499, 550, 562,
564, 587, 591, 595, 597, 598, 612, 625, 631, 640, 641, 645,
648, 656, 661, 665, 666, 670, 674, 675, 681, 682, 683

<223> n = A,T,C or G

<221> misc_feature

<222> 687, 688, 692, 710, 721, 778, 788, 811, 820, 830, 860, 867,
868, 871, 872, 889, 892, 896, 897, 899, 904, 915, 936, 951,
960, 970, 986, 990, 1000

<223> n = A,T,C or G

<400> 5

```

tctagaccaa gaaatgggag gatttttagag tgactgatga tttctctatc atctgcagtt 60
agtaaacatt ctccacagtt tatgcaaaaa gtaacaaaac cactgcagat gacaaacact 120
aggtaacaca catactatct cccaaatacc taccacaag ctcaacaatt ttaaactggt 180
aggatcactg gctctaata caatgacatg aggtcaccac caaacatca agcgctaaac 240
agacagaatg tttccactcc tgatccactg tgtgggaaga agcaccgaac ttaccactg 300
gggggcctgc ntcanaanaa aagcccatgc ccccggtnt ncctttnaac cggaacgaat 360
naaccacca tccccacanc tcctctgttc ntgggcctg catcttgtgg cctcntntnc 420
tttnggggan acntggggaa ggtaccccat ttcnttgacc ccncnanaaa acccngtg 480
ccctttgccc tgattcnct gggccttttc tcttttcct tttgggttgt ttaaattccc 540
aatgtcccn gaaccctctc cntnctgcc aaaacctacc taaattnctc nctangnntt 600
ttcttggtgt tncctttcaa aggtnacctt ncctgttcan ncccnacnaa aatttnttcc 660
ntatnntggg ccnnaaaaaa nnnatcnnc cnaattgcc gaattggttn ggtttttcct 720
nctgggggaa acccttttaa tttccccctt ggccggcccc ccttttttcc ccccttnga 780
aggcaggngg ttcttccga acttccaatt ncaacagccn tgccattgn tgaaaccctt 840
ttcctaaat taaaaaatan cgggttnng nnggcctctt tcccctcng gngggngng 900
aaantcctta cccnnaaaaa ggttgcttag ccccngtcc cactcccc nggaaaaatn 960
aacctttcn aaaaaaggaa tataanttn cactcctn gttctcttc 1010

```

<210> 6

<211> 950

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 199, 200, 209, 223, 224, 236, 240, 241, 244, 248, 249, 262, 263, 267, 268, 269, 270, 271, 272, 273, 280, 281, 283, 285, 286, 287, 288, 289, 290, 291, 293, 295, 296, 300, 302, 303, 309, 313, 314, 315, 316, 317, 318, 319, 320, 322, 323

<223> n = A,T,C or G

<221> misc_feature

<222> 326, 327, 331, 332, 339, 342, 343, 344, 346, 349, 352, 353, 355, 356, 359, 360, 362, 363, 364, 367, 369, 371, 375, 377, 378, 379, 383, 385, 387, 389, 390, 392, 396, 397, 399, 400, 401, 402, 405, 406, 408, 409, 410, 412, 413, 414, 415

<223> n = A,T,C or G

<221> misc_feature

<222> 417, 419, 420, 423, 424, 428, 431, 433, 434, 435, 437, 438, 439, 443, 447, 449, 450, 455, 456, 458, 459, 462, 465, 467, 469, 472, 480, 481, 483, 484, 485, 486, 487, 488, 493, 494, 495, 496, 497, 502, 505, 507, 508, 510, 512, 517, 518

<223> n = A,T,C or G

<221> misc_feature

<222> 520, 521, 524, 526, 531, 536, 538, 539, 543, 544, 548, 549, 550, 552, 553, 555, 556, 557, 561, 563, 566, 570, 571, 572, 576, 577, 579, 580, 582, 583, 585, 588, 590, 591, 592, 594, 597, 603, 606, 607, 614, 616, 618, 620, 621, 622, 623

<223> n = A,T,C or G

<221> misc_feature

<222> 625, 628, 629, 630, 632, 634, 637, 638, 641, 645, 651, 652,

653, 658, 659, 663, 664, 668, 672, 673, 674, 678, 685, 689,
696, 700, 701, 702, 704, 705, 706, 708, 710, 711, 712, 713,
715, 719, 722, 725, 727, 731, 734, 735, 737, 739, 742
<223> n = A,T,C or G

<221> misc_feature
<222> 745, 748, 749, 751, 752, 754, 755, 757, 759, 762, 765, 767,
769, 773, 774, 775, 778, 780, 783, 785, 787, 790, 793, 797,
800, 803, 810, 812, 824, 828, 832, 836, 839, 843, 844, 846,
848, 850, 852, 853, 855, 858, 859, 861, 864, 865, 866
<223> n = A,T,C or G

<221> misc_feature
<222> 868, 869, 872, 875, 880, 886, 889, 890, 891, 892, 893, 895,
896, 901, 902, 906, 908, 913, 914, 916, 918, 921, 924, 925,
930, 932, 935, 940
<223> n = A,T,C or G

<400> 6
tctagagctc gcgggcgcga gctctaatac gactcactat agggcgctga ctcgatctca 60
gctcactgca atctctgccc ccgggggtcat gcgattctcc tgccctcagcc ttccaagtag 120
ctgggattac aggcgtgcaa caccacaccc ggctaatttt gtatttttaa tagagatggg 180
gttttccctt gttggccann atggtctcna acccctgacc tcnngtgatc ccccncccn 240
nganctenna ctgctgggga tnnccgnnnn nnnctctccn ncnncnnnnn ncnncntccn 300
tnntccttnc tcnnnnnnnn cnntcnntcc ncttctcnc cnnntntnt cnnncnccnn 360
cnnncnctt ncccnccnnt tcnctnccn tntccnccn nntcnnccn cnnnnctntn 420
ccnntacntc ntnnnnccnt cctctntnn cctcnnccnt cncnccntc tntctcctc 480
ntnnnnnnct cennnnntct ctnccnccn tncctcnnn nccnccccc ncctcncnc 540
ctnntttnnn cnnccnntcc ntnccttcc nntcnnntnn cnnctcncn ncncttnttc 600
ccnccnnttc ctnccnctn nntntcnnn cncctcncn ntttctcct nntcccnnc 660
tcnnttcnc cnnctcnc cccnccctn ctctcnccn nntnnntntn nnnctcnc 720
tntcncnttc nctntnctn tntctcnc nncnntcnc tncctntnt ctnntcncn 780
tcnctntnt cctcctntn ctntctcctn tntccttccc ctncctnct cnttccnc 840
ccnntntntn tnnccnnt nctnnccnc ctcntttcn tctctnctnn nntnnccctc 900
nnccctncc ctnntcncn nctntaccn tntctcncn tcttcttcc 950

<210> 7
<211> 1086
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 501, 691, 711, 735, 751, 780, 810, 819, 826, 832, 849, 889,
890, 904, 913, 920, 926, 937, 940, 953, 957, 960, 985, 993,
994, 1000, 1012, 1044, 1060, 1063, 1080, 1081
<223> n = A,T,C or G

<400> 7
tctagagctc gcgggcgcga gctcaattaa ccctcactaa agggagctga ctcgatcaga 60
ctgttactgt gtctatgtag aaagaagtag acataagaga ttccattttg ttctgtacta 120
agaaaaattc ttctgccttg agatgctgtt aatctgtaac cctagcccca accctgtgct 180
cacagagaca tgtgtgtgtg tgactcaagg ttcaatggat ttagggctat gctttgttaa 240
aaaagtgtt gaagataata tgcttggtta aagtcacac cattctctaa totcaagtac 300

```

ccaggacac aatacactgc ggaaggccgc agggacctct gtctaggaaa gccaggtatt 360
gtccaagatt tctcccatg tgatagcctg agatatggcc tcatgggaag ggtaagacct 420
gactgtcccc cagcccgaca tccccagcc cgacatcccc cagcccgaca cccgaaaagg 480
gtctgtgctg aggaagatta ntaaaagagg aaggctcttt gcattgaagt aagaagaagg 540
ctctgtctcc tgctcgtccc tgggcaataa aatgtcttgg tgttaaaccg gaatgtatgt 600
tctacttact gagaatagga gaaaacatcc ttagggctgg aggtgagaca ccctggcggc 660
atactgctct ttaatgcacg agatgtttgt ntaattgcc tccagggcca ncccccttcc 720
ttaacttttt atganacaaa aactttgttc ncttttcctg cgaacctctc cccctattan 780
cctattggcc tgcccatccc ctccccaaan ggtgaaaana tgttentaaa tncgagggaa 840
tccaaaacnt tttcccggtg gtccctttc caaccccgtc cctgggccnn tttcctcccc 900
aacntgtccc ggntccttcn ttccncccc ctcccnngan aaaaaacccc gtntganggn 960
gccccctcaa attataacct ttccnaaaca aannggttcn aaggtgggtt gnttccgggtg 1020
cggctggcct tgaggtcccc cctncacccc aatttggaan cngtttttt ttattgccn 1080
ntcccc

```

<210> 8

<211> 1177

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 1, 4, 20, 21, 31, 278, 314, 332, 359, 371, 373, 375, 376,
524, 537, 556, 557, 579, 583, 590, 591, 598, 623, 625, 648,
700, 703, 719, 738, 742, 746, 749, 751, 752, 800, 808, 820,
821, 824, 835, 838, 845, 851, 856, 864, 865, 879, 888

<223> n = A,T,C or G

<221> misc_feature

<222> 911, 920, 926, 935, 945, 950, 952, 956, 969, 972, 977, 981,
992, 999, 1023, 1024, 1032, 1038, 1039, 1040, 1062, 1069,
1075, 1084, 1089, 1104, 1119, 1123, 1131, 1143, 1146, 1152,
1165, 1169, 1172, 1176

<223> n = A,T,C or G

<400> 8

```

nccntttaga tgttgacaan ntaacaagc ngctcaggca gctgaaaaaa gccactgata 60
aagcatcctg gagtatcaga gtttactgtt agatcagcct catttgactt cccctcccac 120
atgggtgttta aatccagcta cactacttcc tgactcaaac tccactattc ctgttcatga 180
ctgtcaggaa ctgttggaac ctactgaaac tggccgacct gatcttcaaa atgtgcccct 240
aggaaagggtg gatgccaccg tgttcacaga cagtaccncc ttctctgaga agggactacg 300
aggggcccgtg gcanctgtta ccaaggagac tnatgtgttg tgggctcagg ctttaccanc 360
aaacacctca ncnonnaagg ctgaattgat cgccctcact caggctctcg gatggggtaa 420
gggatattaa cgttaacact gacagcaggt acgcctttgc tactgtgcat gtacgtggag 480
ccatctacca ggagcgtggg ctactcactc ggcaggtggc tgnatccac tgtaaangga 540
catcaaaagg aaaacnnggc tgttgcccgt ggtaaccana aanctgaten ncagctcnaa 600
gatgctgtgt tgactttcac tcnncctct taaacttgct gccacantc tcctttccca 660
accagatctg cctgacaatc ccataactca aaaaaaaaaa aanactggcc ccgaaccna 720
accaataaaa acgggggangg tnggtnganc nncctgaccc aaaaataatg gatcccccg 780
gctgcaggaa ttcaattcan cttatcnat acccccaach ngngggggg ggcngtncc 840
cattncocct ntattnatte tttnncccc ccccggcct cctttttnaa ctctgtaaa 900
ggaaaacctg ncttaccan ttatcnctg gacntcccc ttcnccggtg gnttanaaaa 960
aaaagccnc antccntcc naaatttgca cngaaaggna aggaatttaa cctttatttt 1020
ttntccttt antttgtnnn ccccttttta cccaggcgaa cngccatct ttaanaaaaa 1080

```

```
<210> 9
<211> 1146
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 1, 4, 5, 8, 9, 348, 706, 742, 745, 751, 758, 772, 793, 819,
842, 846, 860, 866, 886, 889, 911, 939, 945, 955, 960, 982,
999, 1002, 1005, 1009, 1010, 1033, 1047, 1049, 1055, 1058,
1069, 1074, 1079, 1081, 1104, 1105, 1111, 1116, 1118
<223> n = A,T,C or G
```

```
<221> misc_feature
<222> 1121, 1130, 1135, 1136, 1146
<223> n = A,T,C or G
```

<400>	9						
ncnnttntt	gatgttgtct	ttttggcctc	tctttggata	ctttccctct	cttcagaggt	60	
gaaaagggtc	aaaaggagct	gttgacagtc	atcccagggtg	ggccaatgtg	tccagagtac	120	
agactccatc	agtgagggtca	aagcctgggg	cttttcagag	aagggaggat	tatgggtttt	180	
ccaattatac	aagtcagaag	tagaaagaag	ggacataaac	caggaagggg	gtggagcact	240	
catcaccag	agggacttgt	gcctctctca	gtggtagtag	aggggctact	tcctcccacc	300	
acggttgcaa	ccaagaggca	atgggtgatg	agcctacagg	ggacatancc	gaggagacat	360	
gggatgaccc	taagggagta	ggctggtttt	aaggcgggtg	gactgggtga	gggaaactct	420	
cctcttcttc	agagagaagc	agtacagggc	gagctgaacc	ggctgaaggt	cgaggcgaaa	480	
acacggtctg	gctcaggaag	accttggaag	taaaattatg	aatggtgcat	gaatggagcc	540	
atggaagggg	tgctcctgac	caaactcagc	cattgatcaa	tgttagggaa	actgatcagg	600	
gaagccggga	atttcattaa	caacccgcca	cacagcttga	acattgtgag	gttcagtgc	660	
ccttcaaggg	gccactccac	tccaactttg	gccattctac	tttgcnaaat	ttccaaaact	720	
tcctttttta	aggccgaatc	cntantccct	naaaaaacnaa	aaaaaatctg	cncctattct	780	
ggaaaaggcc	cancctttac	caggctggaa	gaaattttnc	cttttttttt	tttttgaagg	840	
cntttnttaa	attgaacctn	aattcncccc	ccccaaaaaa	aaccnccng	gggggcggat	900	
ttccaaaaac	naattccctt	accaaaaaac	aaaaaacccn	cctnttccc	ttcncacctn	960	
ttcttttaat	tagggagaga	tnaagccccc	caatttccng	gntngatn	gtttcccccc	1020	
ccccattttt	ccnaactttt	ttcccancna	ggaancnc	ctttttttng	gtcngattna	1080	
ncaaccttcc	aaaccatttt	tcnnaaaaa	ntttgntngg	ngggaaaaan	acctnntttt	1140	
atagan						1146	

```
<210> 10
<211> 545
<212> DNA
<213> Homo sapiens
```

```
<400> 10
cttcattggg tacgggcccc ctcgaggtcg acggtatcga taagcttgat atcgaattcc 60
tgcagcccg gggatccact agttctagag tcaggaagaa ccaccaacct tcctgatttt 120
tattggtctt gagttctgag gccagttttc ttcttctgtt gagtatgogg gattgtcagg 180
cagatctggc tgtggaaagg agactgtggg cagcaagttt agaggcgtga ctgaaagtca 240
cactgcattt tgagctgctg aatcagcttt ctggttacca cgggcaacag ccgtgttttc 300
cttttgatgt cttttacagt ggattacagc cacctgctga ggtgagtagc ccacgctcct 360
```

```

ggtagatggc tccacgtaca tgcacagtag caaaggcgta cctgctgtca gtgttaacgt 420
taatatcctt accccatcgg agagcctgag tgagggcgat caattcagcc cttttgtgct 480
gagtggtttg ctggttaagc cctgaacca caacacatct gtctccatgg taacagctgc 540
accgg                                             545

```

```

<210> 11
<211> 196
<212> DNA
<213> Homo sapiens

```

```

<400> 11
tctcctaggc tgggcacagt gggtcatacc tgtaatcctg accgtttcag aggctcaggt 60
ggggggatcg cttgagccca agatttcaag actagtctgg gtaacatagt gagaccctat 120
ctctacgaaa aaataaaaaa atgagcctgg tgtagtggca cacaccagct gaggagggag 180
aatcgagcct aggaga                                             196

```

```

<210> 12
<211> 388
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 82, 162, 287
<223> n = A,T,C or G

```

```

<400> 12
tctcctaggc ttgggggctc tgactagaaa ttcaaggaac ctgggattca agtccaactg 60
tgacaccaac ttacactgtg gnetccaata aactgcttct ttcctattcc ctctctatta 120
aataaaataa ggaaaacgat gtctgtgtat agccaagtca gntatcctaa aaggagatac 180
taagtgacat taaatatcag aatgtaaaac ctgggaacca gggtcccagc ctgggattaa 240
actgacagca agaagactga acagtactac tgtgaaaagc ccgaagnngc aatatgttca 300
ctctaccgtt gaaggatggc tgggagaatg aatgctctgt ccccagtcct caagctcact 360
tactatacct cctttatagc ctaggaga                                             388

```

```

<210> 13
<211> 337
<212> DNA
<213> Homo sapiens

```

```

<400> 13
tagtagttgc ctataatcat gtttctcatt attttcacat tttattaacc aatttctggt 60
taccctgaaa aatatgaggg aaatatatga aacagggagg caatgttcag ataattgatc 120
acaagatatg atttctacat cagatgctct ttcctttcct gtttatttcc tttttatttc 180
ggttgtgggg tcgaatgtaa tagctttgtt tcaagagaga gttttggcag tttctgtagc 240
ttctgacact gctcatgtct ccaggcatct atttgcactt taggaggtgt cgtgggagac 300
tgagaggtct attttttcca tatttgggca actacta                                             337

```

```

<210> 14
<211> 571
<212> DNA
<213> Homo sapiens

```

```

<220>

```

<221> misc_feature
 <222> 435, 441, 451, 456, 462, 479, 488, 489, 509, 568
 <223> n = A,T,C or G

<400> 14
 tagtagttgc catacagttgc ctttccattt atttaacccc cacctgaacg gcataaaactg 60
 agtggttcagc tgggtgttttt tactgtaaac aataaggaga ctttgctctt catttaaacc 120
 aaaatcatat ttcataatttt acgctcgagg gtttttaccg gttccttttt acactcctta 180
 aaacagtttt taagtcgttt ggaacaagat attttttctt tcctggcagc ttttaacatt 240
 atagcaaatt tgtgtctggt ggactgctgg tcaactgttc tcacagttgc aaatcaaggc 300
 atttgcaacc aagaaaaaaa aatttttttg ttttatttga aactggaccg gataaacggt 360
 gtttgagagcg gctgctgtat atagttttaa atggtttatt gcacctcctt aagttgcact 420
 tatgtggggg ggggnttttg natagaaagt ntttantcac anagtcacag ggacttttnt 480
 cttttggnna ctgagctaaa aagggtgnt tttcgggtgg gggcagatga aggctcacag 540
 gaggcctttc tcttagaggg ggaactnct a 571

<210> 15
 <211> 548
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 224, 291, 326, 376, 388, 394, 428, 433, 507, 514
 <223> n = A,T,C or G

<400> 15
 tatatatatta ataaacttaaa tatattttga tcacccactg ggggtgataag acaatagata 60
 taaaagtatt tccaaaaagc ataaaaccaa agtatcatac caaaccaa at tcatactgct 120
 tccccacccc gcaactgaaac ttcaccttct aactgtctac ctaaccaa at tctacccttc 180
 aagtcttttg tgcgtgctca ctactctttt tttttttttt tttnttttg agatggagtc 240
 tggctgtgca gccaggggt ggagtacaat ggcacaacct cagctcactg naacctccgc 300
 ctcccaggtt catgagattc tctgnttca gccttcccag tagctgggac tacaggtgtg 360
 catcaccatg cctggntaat cttttttngt tttngggtag agatgggggt tttacatgtt 420
 ggccagntg gnttogaact cctgacctca agtgatccac ccacctcagg ctcccaaagt 480
 gctaggatta cagacatgag ccactgngcc cagnctggt gcatgctcac ttctctaggc 540
 aactacta 548

<210> 16
 <211> 638
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 471, 488
 <223> n = A,T,C or G

<400> 16
 ttccggttatg cacatgcaga atattctatc ggtacttcag ctattactca ttttgatggc 60
 gcaatccgag cctatctca agatgagtat ttgaaagaa ttgatttagc gatagaccaa 120
 gctggtaagc actctgacta cacgaaattg ttcagatgtg atggatttat gacagttgat 180
 ctttggaaga gattattaag tgattatttt aaagggaatc cattaattcc agaatatctt 240
 ggtttagctc aagatgatat agaaatagaa cagaaagaga ctacaaatga agatgtatca 300

```

ccaactgata ttgaagagcc tatagtagaa aatgaattag ctgcatttat tagccttaca 360
catagcgatt ttctgatga atcttatatt cagccatcga catagcatta cctgatgggc 420
aaccttacga ataatagaaa ctgggtgcgg ggctattgat gaattcatcc ncagtaaatt 480
tggatatnac aaaatataac tcgattgcat ttggatgatg gaatactaaa tctggcaaaa 540
gtaactttgg agctactagt aacctctctt tttgagatgc aaaattttct tttagggttt 600
cttattctct actttacgga tattggagca taacggga 638

```

```

<210> 17
<211> 286
<212> DNA
<213> Homo sapiens

```

```

<400> 17
actgatggat gtcgccggag gcgaggggcc ttatctgatg ctcggtgcc tggtcgtgat 60
gtgcgcggcg attgggctgt ttatctcaaa caccgccacg gcggtgctga tggcgctat 120
tgccttagcg gcggcggaagt caatgggctg ctcaccctat ccttttgcca tgggtgggtggc 180
gatggcggct tcggcggcgt ttatgacccc ggtctcctcg ccggttaaca ccctgggtgct 240
tggccctggc aagtactcat ttagcgattt tgtcaaaata ggcgtg 286

```

```

<210> 18
<211> 262
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 184, 234, 240
<223> n = A,T,C or G

```

```

<400> 18
tcgggtcatag cagccccctt ttctcaattt catctgtcac taccctgggtg tagtatctca 60
tagccttaca tttttatagc ctctccctg gtctgtcttt tgattttcct gcctgtaatc 120
catatcacac ataactgcaa gtaaacattt ctaaagtgtg gttatgctca tgtcactcct 180
gtgncaagaa atagtttcca ttaccgtctt aataaaaattc ggatttggtc tttncatttn 240
tcactcttca cctatgaccg aa 262

```

```

<210> 19
<211> 261
<212> DNA
<213> Homo sapiens

```

```

<400> 19
tcgggtcatag caaagccagt ggtttgagct ctctactgtg taaactccta aaccaaggcc 60
atztatgata aatgggtggc ggatttttat tataaacatg tacocatgca aatttcctat 120
aactctgaga tatattcttc tacatttaaa caataaaaat aatctatttt taaaagccta 180
atgtgcgtag ttaggtaaga gtgtttaatg agagggtata aggtataaat caccagtcaa 240
cgtttctctg cctatgaccg a 261

```

```

<210> 20
<211> 294
<212> DNA
<213> Homo sapiens

```

```

<220>

```

<221> misc_feature
 <222> 194, 274, 283, 294
 <223> n = A,T,C or G

<400> 20
 tacaacgagg cgacgtcggg aaaatcggac atgaagccac cgctgggtctt ttcgtccgag 60
 cgataggcgc cggccagcca gcggaacggg tgcccggatg gcgaagcgag ccggagttct 120
 tcggactgag tatgaatctt gttgtgaaaa tactcgccgc cttcgttcga cgacgtcgcg 180
 tcgaaatctt cganctcctt acgatcgaag tcttcgtggg cgacgatcgc ggtcagttcc 240
 gccccaccga aatcatgggt gagccggatg ctgnccccga agncctcgtt tgtn 294

<210> 21
 <211> 208
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 116, 132, 140, 160, 164, 191, 197, 199
 <223> n = A,T,C or G

<400> 21
 ttggtaaagg gcatggacgc agacgcctga cgtttggtctg aaaatctttc attgattcgt 60
 atcaatgaat agggaaattc ccaaagaggg aatgtcctgt tgctcgccag tttttntggt 120
 gttctcatgg anaaggcaan gagctcttca gactattggn atntcgttc ggtcttctgc 180
 caactagtcg ncttgcnang atcttcat 208

<210> 22
 <211> 287
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 1, 4, 25, 121, 168, 207, 212
 <223> n = A,T,C or G

<400> 22
 nccnttgagc tgagtgattg agatntgtaa tgggttgtaag ggtgattcag gcggattagg 60
 gtggcggggtc acccggcagt gggctctccg acaggccagc aggatttggg gcagggtacgg 120
 ngtgcgcacg gctcgactat atgctatggc aggcgagccg tggaaggngg atcagggtcac 180
 ggcgctggag ctttccacgg tccatgnatt gngatggctg ttctaggcgg ctgttgccaa 240
 gcgtgatggg acgctggctg gagcattgat ttctgggtgcc aaggtgg 287

<210> 23
 <211> 204
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 40, 121, 131, 162, 184, 197
 <223> n = A,T,C or G

<400> 23
 ttgggtaaag ggagcaagga gaaggcatgg agaggctcan gctggtcctg gcctacgact 60
 gggccaagct gtcgccgggg atggtggaga actgaagcgg gacctcctcg aggtcctccg 120
 ncgttacttc nccgtccagg aggaggggtct ttccgtgggc tnggaggagc ggggggagaa 180
 gatnctcctc atggtcnaca tccc 204

<210> 24
 <211> 264
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 171, 206
 <223> n = A,T,C or G

<400> 24
 tggattgggc aggagcgggt agagtggcac cattgagggg atattcaaaa atattatattt 60
 gtcctaaatg atagtgtgct agtttttctt tgacctatga gttatattgg agttttatattt 120
 ttaactttcc aatcgcatgg acatgttaga cttattttct gttaatgatt nctattttta 180
 ttaaattgga tttgagaaat tggttnttat tatatcaatt tttggtattt gttgagtttg 240
 acattatagc ttagtatgtg acca 264

<210> 25
 <211> 376
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 103, 111, 192, 196, 199, 220, 224, 230, 251, 268, 283, 317,
 352, 370, 374
 <223> n = A,T,C or G

<400> 25
 ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtgggtg 60
 tgcacccgca atcccagcta cttggggagg tgagacacaa gantcaccta natgtgggag 120
 gtcaagggtg catgagtcac gattgtgcca ctgcactcca gcctgggtga cagaccgaga 180
 ccctgcctca anaganaang aataggaagt tcagaaatcn tggntgtggn gccagcaat 240
 ctgcatctat ncaaccctcg caggcaangc tgatgcagcc tangttcaag agctgctgtt 300
 tctggaggca gcagttnggg cttccatcca gtatcacggc cacactcgca cnagccatct 360
 gtccctccgtg tgnac 376

<210> 26
 <211> 372
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 231, 312, 340
 <223> n = A,T,C or G

<400> 26

```

ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtgggtggtg 60
tgcacctgta atcccagcta cttgggcggc tgagacacaa gaaccaccta aatgtgggag 120
ggtcaagggtt gcatgagtca tgatcgcgcc actgcactcc agcctgggtg acagactgag 180
accctgcctc aaaagaaaaa gaataggaag ttcagaaacc ctgggtgtgg ngcccagcaa 240
tctgcattta aacaatccct gcaggcaatg ctgatgcagc ctaagttcaa gagctgctgt 300
tctggaggca gnagtaaggg cttccatcca gcatcacggn caacactgca aaagcacctg 360
tcctcgttgg ta 372

```

<210> 27
 <211> 477
 <212> DNA
 <213> Homo sapiens

```

<400> 27
ttctgtccac atctacaagt tttatttatt ttgtgggttt tcagggtgac taagtttttc 60
cctacattga aaagagaagt tgctaaaagg tgcacaggaa atcatttttt taagtgaata 120
tgataatatg ggtccgtgct taatacaact gagacatatt tgttctctgt ttttttagag 180
tcacctctta aagtccaatc ccacaatggt gaaaaaaaaa tagaaagtat ttgttctacc 240
tttaaggaga ctgcagggat tctccttgaa aacggagtat ggaatcaatc ttaaataaat 300
atgaaattgg ttggtcttct gggataagaa attcccaact cagtgtgctg aaattcacct 360
gacttttttt gggaaaaaat agtcgaaaat gtcaatttgg tccataaaat acatgttact 420
attaaaagat atttaaagac aaattctttc agagctctaa gattggtgtg gacagaa 477

```

<210> 28
 <211> 438
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 4, 16, 30, 255, 413
 <223> n = A,T,C or G

```

<400> 28
tctncaacct cttgantgtc aaaaaccttn taggctatct ctaaaagctg actgggtattc 60
attccagcaa aatccctcta gtttttggag tttcctttta ctatctgggg ctgcctgagc 120
cacaaatgcc aaattaagag catggctatt ttccggggct gacaggtcaa aaggggtgta 180
aatccgataa gcctcctgga ggtgctctaa aaacactcct ggtgactcat catgccctg 240
gacgacttca atcgncttag acaagtttat aggtttctgg gcagctccct gaataccac 300
gaggagatac cggtggaaat cgtcaaaaagt tctccctcca cttgagaaat ttgggtccca 360
attaggtccc aattgggtct ctaatcacta ttcctctagc ttcctcctcc ggnctattgg 420
ttgatgtgag gttgaaga 438

```

<210> 29
 <211> 620
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 391, 481, 483, 490, 497, 510, 527, 532, 540, 545, 593, 612
 <223> n = A,T,C or G

<400> 29

```

aagaggggtac cagccccaag ccttgacaac ttccataggg tgtcaagcct gtgggtgcac 60
agaagtcaaa aattgagttt tgggatcctc agcctagatt tcagaggata taaagaaaca 120
cctaacacct agatattcag acaaaagttt actacaggga tgaagctttc acggaaaacc 180
tctactagga aagtacagaa gagaaatgtg ggtttggagc ccccaaacag aatcccctct 240
agaacctgc ctaatgaaac tgtgagaaga tggccactgt catccagaca ccagaatgat 300
agaccacca aaaacttatg ccatattgcc tataaaacct acagacactc aatgccagcc 360
ccatgaaaaa aaaactgaga agaagactgt nccctacaat gccaccggag cagaactgcc 420
ccaggccatg gaagcacagc tcttatatca atgtgacctg gatgttgaga catggaatcc 480
nangaaatcn ttttaanact tccacggtnn aatgactgcc ctattanatt cngaacttan 540
atccnggcct gtgacctctt tgctttggcc attccccctt tttggaatgg ctnttttttt 600
cccattgectg tncctcttta                                     620

```

```

<210> 30
<211> 100
<212> DNA
<213> Homo sapiens

```

```

<400> 30
ttacaacgag ggggtcaatg tcataaatgt cacaataaaa caatctcttc tttttttttt 60
tttttttttt tttttttttt tttttttttt tttttttttt                                     100

```

```

<210> 31
<211> 762
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 626, 652, 662, 715, 736
<223> n = A,T,C or G

```

```

<400> 31
tagtctatgc gccggacaga gcagaattaa attggaagtt gccctccgga ctttctaccc 60
acactcttcc tgaagagaga aagaaaagag gcaggaaaga ggtaggatt tcattttcaa 120
gagtcagcta attaggagag cagagtttag acagcagtag gcaccccatg atacaaacca 180
tggaacaaagt cctgttttag taactgccag acatgatcct gctcaggttt tgaaatctct 240
ctgcccataa aagatggaga gcaggagtgc catccacatc aacacgtgtc caagaaagag 300
tctcagggag acaagggtat caaaaaacaa gattcttaat gggaaggaaa tcaaaccaaa 360
aaattagatt tttctctaca tatatataat atacagatat ttaacacatt attccagagg 420
tggtctcagt ccttggggct tgagagatgg tgaaaacttt tgttccacat taacttctgc 480
tctcaaattc tgaagtatat cagaatggga caggcaatgt tttgctccac actggggcac 540
agaccctaat ggttctgtgc ccgaagaaga gaagcccgaa agacatgaag gatgcttaag 600
gggggttggg aaagccaaat tgggtantatc ttttctctct gcctgtgttc cngaagtctc 660
cnctgaagga attcttaaaa ccctttgtga ggaaatgcc ccttaccatg acaantgggc 720
ccattgcttt taggngatg gaaacaccaa gggttttgat cc                                     762

```

```

<210> 32
<211> 276
<212> DNA
<213> Homo sapiens

```

```

<400> 32
tagtctatgc gtgtattaac ctcccctccc tcagtaacaa ccaaagaggc aggagctggt 60
attaccaacc ccattttaca gatgcatcaa taatgacaga gaagtgaagt gacttgcgca 120

```

```
<210> 33
<211> 477
<212> DNA
<213> Homo sapiens
```

```
<210> 34
<211> 631
<212> DNA
<213> Homo sapiens
```

```
<210> 35
<211> 578
<212> DNA
<213> Homo sapiens
```

<400> 35						
tagtagttgc	catcccatat	tacagaaggc	tctgtataca	tgacttattt	ggaagtgatc	60
tgttttctct	ccaaacccat	ttatcgtaat	ttcaccagtc	ttggatcaat	cttggtttcc	120
actgatacca	tgaaacctac	ttggagcaga	cattgcacag	ttttctgtgg	taaaaactaa	180
aggtttattt	gctaagctgt	catcttatgc	ttagtatitt	ttttttacag	tggggaattg	240
ctgagattac	atthttgtht	tcattagata	ctttgggata	acttgacact	gtcttctttt	300
tttcgctttt	aattgctatc	atcatgcttt	tgaacaaga	acacattagt	cctcaagtat	360
tacataagct	tgcttgttac	gcttggtggt	ttaaaggact	atctttggcc	tcaggttcac	420
aagaatgggc	aaagtgtttc	cttatgttct	gtagtcttca	ataaaagatt	gccaggggcc	480
gggtactgtg	gctgcactg	taatcccage	actttgggaa	gctgaggctg	gcgatcatg	540
ttagggcgag	tgthcgaaac	cagcctgggc	aactacta			578

<210> 36
 <211> 583
 <212> DNA
 <213> Homo sapiens

<400> 36
 tagtagttgc ctgtaatccc agcaactcag gaggctgggg caggagaatc agttgaacct 60
 gggaggcaga agttgtaatt agcaaagatc gcaccattgc acttcagcct gggcaacaag 120
 agtgagattc catctcaaaa acaaaaaaaaa gaaaaagaaa agaaaaggaa aaaacgtata 180
 aaccagcca aaacaaaatg atcattcttt taataagcaa gactaattta atgtgtttat 240
 ttaatcaaa cagttgaatc ttctgagtta ttggtgaaaa taccatgta gttaatttag 300
 ggttcttact tgggtgaacg tttgatgttc acagggtata aaatgggtta caaggaaaaat 360
 gatgcataaa gaatcttata aactactaaa aataaataaa atataaatgg atagggtgta 420
 tggatggagt ttttgtgtaa tttaaaatct tgaagtcatt ttggatgctc attggttgct 480
 tggtaatttc cattaggaaa aggttatgat atggggaaac tgtttctgga aattgcggaa 540
 tgtttctcat ctgtaaaatg ctagtatctc agggcaacta cta 583

<210> 37
 <211> 716
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 15, 669, 673, 678, 686, 704
 <223> n = A,T,C or G

<400> 37
 gatctactag tcatntggat tctatccatg gcagctaagc ctttctgaat ggattctact 60
 gctttcttgt tctttaatcc agacccttat atatgtttat gttcacaggc agggcaatgt 120
 ttagtgaaaa caattctaaa ttttttatTT tgcatTTTca tgctaatttc cgtcacactc 180
 cagcaggctt cctgggagaa taaggagaaa tacagctaaa gacattgtcc ctgcttactt 240
 acagcctaatt ggtatgcaaa accacttcaa taaagtaaca ggaaaagtac taaccaggta 300
 gaatggacca aaactgatat agaaaaatca gaggaagaga ggaacaaata tttactgagt 360
 cctagaatgt acaaggcttt ttaattacat attttatgta aggcctgcaa aaaacagggtg 420
 agtaatcaac atttgtccca ttttacatat aaggaaactg aagcttaaat tgaataattt 480
 aatgcataga ttttatagtt agaccatgtt cagggtcccta tggtatactt actagctgta 540
 tgaatatgag aaaataattt tgttatTTTc ttggcatcag tattttcatc tgcaaaaataa 600
 agctaaagtt atttagcaaa cagtcagcat agtgccctgat acatagtagg tgctccaaac 660
 atgattacnc tantattngg tattanaaaa atccaatata ggcntggata aaaccg 716

<210> 38
 <211> 688
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 260
 <223> n = A,T,C or G

<400> 38
 ttctgtccac atatcatccc actttaattg ttaatcagca aaactttcaa tgaaaaatca 60
 tccattttta ccaggatcac accaggaaac tgaagggtga ttttttttta ccttaaaaaa 120

```
<210> 39
<211> 585
<212> DNA
<213> Homo sapiens
```

<400>	39						
tagtagttgc	cgcnnaccta	aaanttggaa	agcatgatgt	ctaggaaaca	tantaaaata	60	
gggtatgcct	atgtgctaca	gagagatgtt	agcatttaaa	gtgcatantt	ttatgtattt	120	
tgacaaatgc	atatnoctct	ataatccaca	actgattacg	aagctattac	aattaaaaag	180	
tttggccggg	cgtggtgggc	ggtggctgac	gcctgtaatc	ccagcacttt	gggaggccga	240	
ggcacgcgga	tcacgaggtc	gggagttcaa	gaccatctgt	gctaacacgg	tgaaggtcca	300	
tctctactaa	aaatacgaag	aaattacccc	ggcgtgtggg	cgggcgccgt	tagtcccagc	360	
tactccggag	gctgaggcag	gagaatggcg	tgaacccagg	acacgcgagc	tgcagtgtgc	420	
caacatcacg	tcactgccct	ccagcctggg	ggacaggaac	aagantcccg	tcctcanaaa	480	
agaaaaatac	tactnatant	ttnacttta	ttttaantta	cacagaactn	cctcttggtg	540	
cccccttacc	attcatctca	cccacctcct	atagggcacn	nctaa		585	

[illegible]

```
<210> 41
<211> 423
<212> DNA
<213> Homo sapiens
```

<400> 41
 taagagggtta catcgggtaa gaacgtaggc acatctagag cttagagaag tctggggtag 60
 gaaaaaaatc taagtattta taagggtata ggtaacattt aaaagtaggg ctagctgaca 120
 ttattttagaa agaacacata cggagagata agggcaaagg actaagacca gaggaacact 180
 aatatttagt gatcacttcc attotttgta aaaatagtaa cttttaagtt agcttcaagg 240
 aagatttttg gccatgatta gttgtcaaaa gttagttctc ttgggtttat attactaatt 300
 ttgttttaag atccttgta gtgctttaat aaagtcattg tatatcaaac gctctaaaac 360
 attgtagcat gttaaattgc acaatatact taccatttgt tgtatatggc tgtaccctct 420
 cta 423

<210> 42
 <211> 527
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 470, 475, 515, 522
 <223> n = A,T,C or G

<400> 42
 tctcctaggc taatgtgtgt gtttctgtaa aagtaaaaag ttaaaaattt taaaaataga 60
 aaaaagctta tagaataaga atatgaagaa agaaaatatt ttgtacatt tgcacaatga 120
 gtttatgttt taagctaagt gttattacaa aagagccaaa aaggttttta aaattaaaac 180
 gtttgtaaag ttacagtacc cttatgttaa ttataattg aagaaagaaa aacttttttt 240
 tataaatgta gtgtagccta agcatacagt atttataaag tctggcagtg ttcaataatg 300
 toctaggcct tcacattcac tcaactgactc acccagagca acttccagtc ctgtaagctc 360
 cattcgtggt aagtgcctta tacagggtgca ccattttatt tacagtattt ttactgtacc 420
 ttctctatgt ttccatatgt ttcgatatac aaataccact gggtactatn gcccnacagg 480
 taattccagt aacacggcct gtatacgtct ggtancccta gngaaga 527

<210> 43
 <211> 331
 <212> DNA
 <213> Homo sapiens

<400> 43
 tcttcaacct cgtaggacaa ctctcatatg cctgggcact atttttaggt tactaccttg 60
 gctgcccttc ttttaagaaa aaaaaagaag aaaaaagaac ttttccacaa gtttctcttc 120
 ctctagttgg aaaattagag aaatcatgtt tttaattttg tgttatttca gatcacaat 180
 tcaaacactt gtaaacatta agcttctgtt caatcccctg ggaagaggat tcattctgat 240
 atttacggtt caaaagaagt tgtaatatg tgcttggaac acagagaacc agttattaac 300
 ttctactac tattatataa taaataataa c 331

<210> 44
 <211> 592
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 473
 <223> n = A,T,C or G

<400> 44
 ggcttagtag ttgccaggca aaatarcgtt gattctctctc aggagccacc cccaacaccc 60
 ctgtttgctt ctagacctat acctagacta aagtcccagc agacccttag aggtgaggtt 120
 cagagtgacc cttgaggaga tgtgctacac tagaaaagaa ctgcttgagt tttctaattt 180
 atataagcag aaatctggag aagagtcata ggaatggata ttaaggggtg gagataatgg 240
 cggaaggaat atagagttgg atcaggctgg acttattgat ttgaaccacac taagtagaga 300
 ttctgctttt gatgttgacg ctgaggaggt taaaaaaggt tttaatgggt ctaatagttt 360
 atttgcttgg ttagctgaaa tatggataaa agatggccca ctgtgagcaa gctggaaatg 420
 cctgatctct ctcagtttaa tgtagaggaa gggatccaaa agtttaggga ganttgatg 480
 ctggraktg attggtcact ttgrgacctt cccwtcccag ctgggagggg ccagaagata 540
 cacccttgac caacgctttg cgaaatggat ttgtgatggc ggcaactact aa 592

<210> 45
 <211> 567
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 522, 561, 566
 <223> n = A,T,C or G

<400> 45
 ggcttagtag ttgccattgc gagtgccttc tcaacgagcg ttgaacatgg cggattgtct 60
 agattcaacg gatttgagtt ttaccagcaa agcgaaccaa gcgcggccca gagaattatg 120
 gggttggttg ctttgaaaag atggaaatcc tgtaggccta gtcagaaaag ccttcttgca 180
 gaacagttgg ttctcggggc aacgctcatc aagatgccca ttggaaaggc tagcgtgtat 240
 ttgggagagc ctgatagcgt gtcttctgat gatgtttgtg cttggacagt gacaaaagat 300
 atgcaaagca agtccgaact agacgtcaag cttcgtgagc aaattattgt agactcctac 360
 ttatactgtg aggaatgata gccaaagggtg gggactttta gactaagggt gtttgtactt 420
 gcgcgatga tcccaggcag aaagamctga tcgctagttt tatacgggca actactaagc 480
 cgaattccag cacactggcg gccgttacta attggatccg anctcgggtac cagcttgatg 540
 catascttga gttwtctata ntgtcnc 567

<210> 46
 <211> 908
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 21, 23, 24, 27, 29, 34
 <223> n = A,T,C or G

<400> 46
 gagcgaaaga ccgagggcag ngnntangng cgangaagcg gagagggcca aaaagcaacc 60
 gctttccccc ggggggtgcc attcattaag gcaggtggag gacaggtttc ccgatggaag 120
 gcggcagggg cgcaagcaat taatgtgagt aggccattca ttagcaccgg ggcttaacat 180
 ttaagcttcg ggttggtatg tgggtggaat tgtgagcggg taacaatttc acacaggaaa 240
 cagctatgac catgattacg ccaagctatt taggtgacat tatagaataa ctcaagttat 300
 gcatcaagct tggtaccgag ttcggatcca ctagtaacgg ccgccagtgt gtggaattcg 360
 gcttagtagt tgccgaccat ggagtgtctac ctaggctaga atacctgagy tcttccttag 420
 cctcactcac attaaattgt atcttttcta cattagatgt cctcagcgcc ttatttctgc 480
 tggacwatcg ataaattaat cctgatagga tgatagcagc agattaatta ctgagagtat 540

```

gttaatgtgt catccctcct atataacgta tttgcatttt aatggagcaa ttctggagat 600
aatccctgaa ggcaaaggaa tgaatcttga gggtagagaa gccagaatca gtgtccagct 660
gcagttgtgg gagaagggtga tattatgtat gtctcagaag tgacaccata tgggcaacta 720
ctaagcccga attccagcac actggcgggc gttactaatg gatccgagct cggtagcaag 780
cttgatgcat agcttgagta tctatagtgt cactaaatag cctggcggtta tcatggtcat 840
agctgtttcc tgtgtgaaat tgttatccgc tccaattcc cccaccata cgagccgga 900
cataaagt 908

```

```

<210> 47
<211> 480
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 408, 461
<223> n = A,T,C or G

```

```

<400> 47
tgccaacaag gaaagtttta aatttccct tgaggattct tggatgatcat caaattcagt 60
ggtttttaag gttgttttct gtcaaataac tctaacttta agccaaacag tatatggaag 120
cacagataka atattacaca gataaaagag gagttgatct aaagtaraga tagttggggg 180
ctttaatttc tggaacctag gtctcccat cttcttctgt gctgaggaac ttcttgggaag 240
cggggattct aaagtctttt ggaagacagt ttgaaaacca ccatgttggt ctcagtacct 300
ttatttttaa aaagtaggtg aacattttga gagagaaaag ggcttgggtg agatgaagtc 360
ccccccccc cttttttttt ttttagctga aatagatacc ctatgttnaa rgaarggatt 420
attatttacc atgccaytar scacatgctc tttgatgggc nyctccstac cctccttaag 480

```

```

<210> 48
<211> 591
<212> DNA
<213> Homo sapiens

```

```

<400> 48
aagagggtag cgagtggaat ttccgcttca ctagtctggt gtggctagtc ggtttcgtgg 60
tggccaacat tacgaacttc caactcaacc gttcttggac gttcaagcgg gagtagcggc 120
gaggatgggt gcgtgaattc tggcctttct ttgccgtggg atcggtagcc gccatcatcg 180
gtatgtttat caagatcttc tttactaacc cgacctctcc gatttacctg cccgagccgt 240
ggtttaacga ggggaggggg atccagtcac gcgagtactg gtcccagatc ttccgcatcg 300
tcgtgacaat gcctatcaac ttcgctcgta ataagttgtg gaccttccga acggtgaagc 360
actccgaaaa cgtccgggtg ctgctgtgcg gtgactccca aaatcttgat aacaacaagg 420
taaccgaatc gcgctaagga accccggcat ctcggttact ctgcatatgc gtacccttta 480
agccgaattc cagcacactg gcggccgtta ctaattggat ccgaactccg taaccaagcc 540
tgatgcgtaa cttgagttat tctatagtgt ccctaaaata acctggcggt a 591

```

```

<210> 49
<211> 454
<212> DNA
<213> Homo sapiens

```

```

<400> 49
aagagggtag ctgccttgaa atttaaagt ctaaggaaar tgggagatga ttaagagttg 60
gtgtggcyta gtcacaccaa aatgtattta ttacatcctg ctccctttcta gttgacagga 120

```

```

aagaaagctg ctgtggggaa aggagggata aatactgaag ggatttacta aacaaatgtc 180
catcacagag ttttcctttt tttttttttg agacagagtc ttgctctgtc acccaggctg 240
gaatgaagwg gtatgatctc agttgaatgc aacctctacc tcctaggttc aagcgattct 300
catgcctcag cctcctgagc agctgggact ataggcgcat gctaccatgc caggctaatt 360
tttatatttt tattagagac ggggtgttgc catgttggcc aggcaggctc cgaactcctg 420
ggcctcagat gatctgcccc accgtaccct cttt                                     454

```

<210> 50

<211> 463

<212> DNA

<213> Homo sapiens

<400> 50

```

aagagggtac caaaaaaaag aaaaaggaaa aaaagaaaaa caacttgtat aaggctttct 60
gctgcataca gctttttttt tttaaataaa tggtgccaac aaatgttttt gcattcacac 120
caattgctgg ttttgaaatc gtactcttca aagggtattg tgcagatcaa tccaatagtg 180
atgccccgta ggttttgtgg actgcccacg ttgtctacct tctcatgtag gagccattga 240
gagactgttt ggacatgect gtgttcatgt agccgtgatg tccggggggc gtgtacatca 300
tgttaccgtg ggggtggggc tgcatgggct gctgggcata tggctgggtg cccatcatgc 360
ccatctgcat ctgcataggg tattggggcg tttgatccat atagccatga ttgctgtggt 420
agccactggt catcattggc tgggacatgc tgttaccctc tta                                     463

```

<210> 51

<211> 399

<212> DNA

<213> Homo sapiens

<400> 51

```

cttcaacctc ccaaagtgtt gggattacag gactgagcca ccacgctcag cctaagcctc 60
tttttacta ccctctaagc gatctaccac agtgatgagg ggctaaagag cagtgaatt 120
tgattacaat aatggaactt agatttatta attacaatt tttccttagc atgttggttc 180
cataattatt aagagtatgg acttacttag aaatgagctt tcattttaag aatttcatct 240
ttgaccttct ctattagtct gagcagtatg acactatacg tattttattt aactaaccta 300
ccttgagcta ttacttttta aaaggctata tacatgaatg tgtattgtca actgtaaagc 360
cccacagtat ttaattatat catgatgtct ttgagggtg                                     399

```

<210> 52

<211> 392

<212> DNA

<213> Homo sapiens

<400> 52

```

cttcaacctc aatcaacctt ggtaattgat aaaatcatca cttaactttc tgatataatg 60
gcaataatta tctgagaaaa aaaagtgggtg aaagattaaa cttgcatttc tctcagaatc 120
ttgaaggata tttgaataat tcaaaagcgg aatcagtagt atcagccgaa gaaactcact 180
tagctagaac gttggacca tggatctaag tccttgcctt tccactaacc agctgattgg 240
ttttgtgtaa acctcctaca cgcttgggct tggctgcctc atttgtcaaa gttaaaggctg 300
aaataggaag ataataaacc gtgtcttttt ggtctctttt ccatccatta ctctgatttt 360
acaaagaggc ctgtattccc ctggtgaggt tg                                     392

```

<210> 53

<211> 179

<212> DNA

<213> Homo sapiens

<220>
 <221> misc_feature
 <222> 135, 143, 179
 <223> n = A,T,C or G

<400> 53
 ttcgggtgat gcctcctcag gctacagtga agactggatt acagaaaggt gccagcgaga 60
 tttcagattc ctgtaaacct ctaaagaaaa ggagtcgcgc ctcaactgat gtagaaatga 120
 ctagttcagc ataengagac acntctgact ccgattctag aggactgagt gacctgcan 179

<210> 54
 <211> 112
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 31, 49, 54, 55, 75, 91, 107
 <223> n = A,T,C or G

<400> 54
 ttcgggtgat gcctcctcag gctacatcat natagaagca aagtagaana atcnngtttg 60
 tgcattttcc cacanacaaa attcaaata ntggaagaaa ttggganagt at 112

<210> 55
 <211> 225
 <212> DNA
 <213> Homo sapiens

<400> 55
 tgagcttccg cttctgacaa ctcaatagat aatcaaagga caactttaac agggattcac 60
 aaaggagtat atccaaatgc caataaacat ataaaaagga attcagcttc atcatcatca 120
 gaagwatgca aattaaaacc ataatagagaa accactatgt cccactagaa tagataaaat 180
 cttaaaagac tggtaaaacc aagtgttggt aaggcaagag gagca 225

<210> 56
 <211> 175
 <212> DNA
 <213> Homo sapiens

<400> 56
 gctcctcttg ccttaccaac acattctcaa aaacctgtta gactoctaag cattctcctg 60
 ttagtattgg gattttaccc ctgtcctata aagatgttat gtacaaaaa tgaagtggag 120
 ggccataccc tgagggaggg gagggatctc tagtgttgtc agaagcggaa gctca 175

<210> 57
 <211> 223
 <212> DNA
 <213> Homo sapiens

<400> 57
 agccatttac cacccatgga tgaatggatt ttgtaattct agctgttgta ttttgtgaat 60
 ttgttaattt tgttgttttt ctgtgaaaca catacattgg atatgggagg taaaggagtg 120

tcccagttgc tccctggcac tccctttata gccattactg tcttggttct tgtaactcag 180
 gttaggtttt ggtctctctt gctccactgc aaaaaaaaaa aaa 223

<210> 58
 <211> 211
 <212> DNA
 <213> Homo sapiens

<400> 58
 gttcgaaggt gaacgtgtag gtagcggatc tcacaactgg ggaactgtca aagacgaatt 60
 aactgacttg gatcaatcaa atgtgactga ggaaacacct gaaggtgaag aacatcatcc 120
 agtggcagac actgaaaata aggagaatga agttgaagag gtaaaagagg agggtcctaaa 180
 agagatgact ttggatgggt ggtaaatggc t 211

<210> 59
 <211> 208
 <212> DNA
 <213> Homo sapiens

<400> 59
 gctcctcttg ccttaccaac ttgacacca tcatcaacca tgtggccagg tttgcagccc 60
 aggtgcaca tcaggggact gcctcgcaat acttcatgct gttgctgctg actgatgggtg 120
 ctgtgacgga tgtggaagcc acacgtgagg ctgtggtgctg tgcctcgaac ctgcccattgt 180
 cagtgatcat tatgggtggt aaatggct 208

<210> 60
 <211> 171
 <212> DNA
 <213> Homo sapiens

<400> 60
 agccatttac caccataact aaattctagt tcaaactcca acttcttcca taaaacatct 60
 aaccactgac accagttggc aatagcttct tccttcttta acctcttaga gtatttatgg 120
 tcaatgccac acatttctgc aactgaataa agttggtaag gcaagaggag c 171

<210> 61
 <211> 134
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 37, 70, 80, 86, 88, 97, 117, 123, 131
 <223> n = A,T,C or G

<400> 61
 cgggtgatgc ctctcaggc ttggtgtgt ccaactnact cactggcctc ttctccagca 60
 actggtgaan atgtctcan gaaaancncc acacgngct cagggtgggg tgggaancat 120
 canaatcatc nggc 134

<210> 62
 <211> 145
 <212> DNA
 <213> Homo sapiens

<400> 62

```

agaggggtaca tatgcaacag tatataaagg aagaagtgca ctgagaggaa cttcatcaag 60
gccatttaaat caataagtga tagagtcaag gctcaacca ggtgtgacgg attccagggtc 120
ccaagctcct tactgtgtacc ctctt                                     145

```

<210> 63

<211> 297

<212> DNA

<213> Homo sapiens

<400> 63

```

tgcactgaga ggaattcaaa gggtttatgc caaagaacaa accagtcctc tgcagcctaa 60
ctcatttggt tttgggctgc gaagccatgt agagggcgat caggcagtag atgggtccctc 120
ccacagtcag cgccatggtg gtccggtaaa gcatttggtc aggcaggcct cgtttcaggt 180
agacggggcac acatcagctt tctggaaaaa cttttgtagc tctggagctt tgtttttccc 240
agcataatca tacactgtgg aatcggaggt cagtttagtt ggtaaggcaa gaggagc 297

```

<210> 64

<211> 300

<212> DNA

<213> Homo sapiens

<400> 64

```

gcactgagag gaacttccaa tactatgttg aataggagtg gtgagagagg gcatccttgt 60
cttgtgccgg ttttcaaagg gaatgcttcc agcttttgcc cattcagtat aatattaaag 120
aatgttttac cattttctgt cttgcctggt tttctgtgtt tttgttggtc tcttcattct 180
ccatttttag gcctttacat gttaggaata tatttctttt aatgatactt caccttttgt 240
atcttttgtg agactctact catagtgtga taagcactgg gtttgtaagg caagaggagc 300

```

<210> 65

<211> 203

<212> DNA

<213> Homo sapiens

<400> 65

```

gtctctcttg ccttaccaac tcacccagta tgtcagcaat tttatcrgct ttacctacga 60
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgctt 120
ctcatgggtc tctctgtctc agttctgaac ctttctcttt tcctagaaca tgcatttarg 180
tcgatagaag ttctctcag tgc                                     203

```

<210> 66

<211> 344

<212> DNA

<213> Homo sapiens

<400> 66

```

tacggggacc cctgcattga gaaagcgaga ctcaactctga agctgaaatg ctgttgccct 60
tgcagtgtcg gtacgaggag ttctgtgctt tgtgggctaa ggctcctgga tgacccttga 120
catggagaag gcagagttgt gtgcccttc tcatggcctc gtcaaggcat catggactgc 180
cacacacaaa atgccgtttt tattaacgac atgaaattga aggagagaac acaattcact 240
gatgtggctc gtaaccatgg atatggtcac atacagaggt gtgattatgt aaagggttaat 300
tccaccacc tcatgtggaa actagcctca atgcaggggt ccca                                     344

```

<210> 67
 <211> 157
 <212> DNA
 <213> Homo sapiens

<400> 67
 gcactgagag gaacttcgta gggagggtga actggctgct gaggaggggg aacaacaggg 60
 taaccagact gatagccatt ggatggataa tatggtggtt gaggagggac actacttata 120
 gcagaggggtt gtgtatagcc tgaggaggca tcacccg 157

<210> 68
 <211> 137
 <212> DNA
 <213> Homo sapiens

<400> 68
 gcactgagag gaacttctag aaagtgaag tctagacata aaataaaata aaaattttaa 60
 actcaggaga gacagcccag cacgggtggct cacgcctgta atcccagaac tttgggagcc 120
 tgaggaggca tcacccg 137

<210> 69
 <211> 137
 <212> DNA
 <213> Homo sapiens

<400> 69
 cgggtgatgc ctcttcaggc tgtattttga agactatcga ctggacttct tatcaactga 60
 agaatccggt aaaaatacca gttgtattat ttctacctgt caaaatccat ttcaaagtgt 120
 gaagttcctc tcagtgc 137

<210> 70
 <211> 220
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 89, 112, 129, 171, 172
 <223> n = A,T,C or G

<400> 70
 agcatgttga gcccagacac gcaatctgaa tgagtgtgca cctcaagtaa atgtctacac 60
 gctgcctggt ctgacatggc acaccatcnc gtggagggca casctctgct cngcctacwa 120
 cgagggcant ctcatwgaca ggttcacccc accaaaactgc aagagggtca nnaagtactr 180
 ccaggggtmya sggacmasgg tgggaytyca ycacwcactct 220

<210> 71
 <211> 353
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature

<222> 66, 160, 204, 246, 267, 334, 339, 342

<223> n = A,T,C or G

<400> 71

```
cgttagggtc tctatccact gctaaacat acacctgggt aaacagggac catttaacat 60
tcccanctaa atatgccaag tgacttcaca tgtttatctt aaagatgtcc aaaacgcaac 120
tgattttctc ccctaaacct gtgatgggtg gatgattaan cctgagtggc ctacagcaag 180
ttaagtgcaa ggtgctaaat gaangtgacc tgagatacag catctacaag gcagtacctc 240
tcaacncagg gcaactttgc ttctcanagg gcatttagca gtgtctgaag taatttctgt 300
attacaactc acggggcggg ggggtgaatat ctantggana gnagacccta acg 353
```

<210> 72

<211> 343

<212> DNA

<213> Homo sapiens

<400> 72

```
gcactgagag gaacttccaa tacyatkac agagtgaaca rgcarccyac agaacaggag 60
aaaatgttyg caatctctcc atctgacaaa aggctaatat ccagawtcta awaggaactt 120
aaacaaatth atgagaaaag aacaracaac ctcaawcaaaa agtgggtgaa ggawatgcts 180
aaargaagac atytattcag ccagtaaaca yatgaaaaaa aggcctcatsa tcaactgawca 240
ttagagaaat gcaaatcaaa accacaatga gataccatct yayrccagtt agaayggtga 300
tcattaaaar stcaggaaac aacagatgct ggacaagggtg tca 343
```

<210> 73

<211> 321

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 288

<223> n = A,T,C or G

<400> 73

```
gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac 60
agaagggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt 120
tcaaagttcc catgctgcc aagtgccatc ctttggggta ctgttttctg agctccagtg 180
ataactcatt tatacaagg agataccag aaaaaaagt agcaaactct aaaaagggtg 240
cttgagttca gccttaata ccatcttgaa atgacacaga gaaagaanga tgttgggtgg 300
gagtggatag agaccctaac g 321
```

<210> 74

<211> 321

<212> DNA

<213> Homo sapiens

<400> 74

```
gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac 60
agaagggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt 120
tcaaagttcc catgctgcc aagtgccatc ctttggggta ctgttttctg agctccagtg 180
ataactcatt tatacaagg agataccag aaaaaaagt agcaaactct aaaaagggtg 240
cttgagttca gyccttaata ccatcttgaa atgamacaga gaaagaagga tgttgggtgg 300
gagtggatag agaccctaac g 321
```

<210> 75
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 75
 gcactgagag gaacttccac atgcactgag aaatgcatgt tcacaaggac tgaagtctgg 60
 aactcagttt ctcagttcca atcctgattc aggtgtttac cagctacaca accttaagca 120
 agtcagataa ccttagcttc ctcatatgca aaatgagaat gaaaagtact catcgctgaa 180
 ttgttttgag gattagaaaa acatctggca tgcagtagaa attcaattag tattcatttt 240
 cattcttcta aattaaacaa ataggatttt tagtggtgga acttcagaca ccagaaatgg 300
 gagtggatag agaccct 317

<210> 76
 <211> 244
 <212> DNA
 <213> Homo sapiens

<400> 76
 cgttagggtc tctatccact ccactactg atcaaaactct atttatttaa ttatTTTTat 60
 catactttta gttctgggat acacgtgcag catgcgagg tttgttgcag aggtatacac 120
 ttgccatggt gggttgctgc acccatcagt ccatcatcta cattaggtat ttctcctaata 180
 gctatccctc ccctagcccc ttacaccccc aacaggctct agtgtgtgaa gttcctctca 240
 gtgc 244

<210> 77
 <211> 254
 <212> DNA
 <213> Homo sapiens

<400> 77
 cgttagggtc tctatccact gaaatctgaa gcacaggagg aagagaagca gtyctagtga 60
 gatggcaagt tcwtttacca cactctttaa catttygttt agttttaacc ttattttatg 120
 gataataaag gttaatatta ataatgattt attttaaggc attcccraat ttgcataatt 180
 ctctttttgg agataccctt ttatctccag tgcaagtctg gatcaaagtg atasamagaa 240
 gttcctctca gtgc 254

<210> 78
 <211> 355
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 69, 87, 186, 192, 220, 227, 251, 278, 339, 346, 350
 <223> n = A,T,C or G

<400> 78
 ttcgatagag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt 60
 ccggatggnc acgaagacgc actggancac gtgcttacgt ccttttgctc tgttgatggc 120
 cctgagggga cgcaggaccc ttatgacctt cagaatcttc acaacgggag atggcactgg 180
 attgantccc antgacacca gagacacccc aaccaccagn atatcantat attgatgtag 240
 ttctgtaga nggccccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat 300

ctcaacagtt tccgatggct gtgatgggca tagtcatant taaccntgtn tcgaa 355

<210> 79

<211> 406

<212> DNA

<213> Homo sapiens

<400> 79

taagagggta	ccagcagaaa	ggttagatc	atcagatagc	atcttatacg	agtaatatgc	60
ctgctatttg	aagtgtaat	gagaaggaaa	atttttagcgt	gctcactgac	ctgcctgtag	120
ccccagtgc	agctaggatg	tgcattctcc	agccatcaag	agactgagtc	aagttgttcc	180
ttaagtcaga	acagcagact	cagctctgac	attctgattc	gaatgacact	gttcaggaat	240
cggaaatcctg	tcgattagac	tggaacagctt	gtggcaagtg	aatttgcctg	taacaagcca	300
gatttttttaa	aatttatatt	gtaaataatg	tgtgtgtgtg	tgtgtgtata	tatatatata	360
tgtacagtta	tctaagttaa	tttaaaagtt	gtttggtacc	ctctta		406

<210> 80

<211> 327

<212> DNA

<213> Homo sapiens

<400> 80

tttttttttt	tttactcggc	tcagtctaata	ccttttttga	gtcactcata	ggccagactt	60
agggctagga	tgatgattaa	taagagggat	gacataacta	ttagtggcag	gttagttgtt	120
tgtagggctc	atggtagggg	taaaaggagg	gcaatttcta	gatcaaataa	taagaaggta	180
atagctacta	agaagaattt	tatggagaaa	gggacgcggg	cgggggatat	agggtcgaag	240
cgcactcgt	aaggggtgga	tttttctatg	tagccgttga	gttgtggtag	tcaaaatgta	300
ataattatta	gtagtaagcc	taggaga				327

<210> 81

<211> 318

<212> DNA

<213> Homo sapiens

<400> 81

tagtctatgc	ggttgattcg	gcaatccatt	atttgctgga	ttttgtcatg	tgttttgcca	60
attgcattca	taattttatta	tgcatttatg	cttgatcttc	ctaagtcatg	gtatataatc	120
catgcttttt	atgttttgtc	tgacataaac	tcttatcaga	gccctttgca	cacagggatt	180
caataaataat	taacacagtc	tacatttatt	tggtgaatat	tgcatatctg	ctgtactgaa	240
agcacattaa	gtaacaaagg	caagtgagaa	gaatgaaaag	cactactcac	aacagttatc	300
atgattgcgc	atagacta					318

<210> 82

<211> 338

<212> DNA

<213> Homo sapiens

<400> 82

tcttcaacct	ctactccac	taatagcttt	ttgatgactt	ctagcaagcc	tcgctaacct	60
cgccttacct	cccactatta	acctactggg	agaactctct	gtgctagtaa	ccacgttctc	120
ctgatcaaat	atcactctcc	tacttacagg	actcaacata	ctagtcacag	ccctatactc	180
cctctacata	tttaccacaa	cacaatgggg	ctcactcacc	caccacatta	acaacataaa	240
accctcattc	acacgagaaa	acaccctcat	gttcatacac	ctatccccc	ttctcctcct	300
atccctcaac	cccgacatca	ttaccgggtt	ttcctctt			338

<210> 83
 <211> 111
 <212> DNA
 <213> Homo sapiens

<400> 83
 agccattttac caccatcca caaaaaaaaa aaaaaaaaaaag aaaaatatca aggaataaaa 60
 atagactttg aacaaaaagg aacatttgct ggcctgagga ggcacacccc g 111

<210> 84
 <211> 224
 <212> DNA
 <213> Homo sapiens

<400> 84
 tcgggtgatg cctcctcagg ccaagaagat aaagcttcag acccctaaca catttccaaa 60
 aaggaagaaa ggagaaaaaa gggcatcatc cccgttcga agggtcaggg aggaggaaat 120
 tgagggtgat tcacgagttg cggacaactc ctttgatgcc aagcgagggtg cagccggaga 180
 ctggggagag cgagccaatc aggttttgaa gttcctctca gtgc 224

<210> 85
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 85
 gcaactgagag gaacttcggt ggaaacgggt ttttttcagt taaggctaga cagaagaatt 60
 ctacagtaact tccttggtgt gtgtgtattc aactcacasa gttgaacgat cctttacaca 120
 gagcagactt gtaacactct twttgtggaa tttgcaagt gagatttcag scgctttgaa 180
 gtsaaaggta gaaaaggaaa tatcttccta taaaaactag acagaatgat tctcagaaac 240
 tcctttgtga tgtgtgcgtt caactcacag agtttaacct ttcwtttcat agaagcagtt 300
 aggaaacact ctgtttgtaa agtctgcaag tggatagaga ccctaacg 348

<210> 86
 <211> 293
 <212> DNA
 <213> Homo sapiens

<400> 86
 gcaactgagag gaacttcygt gtgwtgktgt yattcaactc acagagttga asswtsmttt 60
 acabagwkca ggcttkcaaa cactcttttt gtmgaatygt caagwggaka tttsrrocr 120
 tttgwggycw wysktmgaaw mggrwatatc ttcwyatmra amctagacag aaksattctc 180
 akaawstyyy ytgtgawgws tgcrttcaac tcacagagkt kaacmwtlyct kytsatrgag 240
 cagttwkgaa actctmtttc tttggattct gcaagtggat agagacccta acg 293

<210> 87
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

```
<210> 88
<211> 10
<212> DNA
<213> Artificial Sequence
```

```
<400> 88
agtagttgcc                                     10
```

```
<400> 89
ttccgttatg c
```

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

```
<210> 91
<211> 10
<212> DNA
<213> Artificial Sequence
```

```
<400> 91
tcggtcatag                                     10
```

$\langle 210 \rangle$	92
$\langle 211 \rangle$	10

<212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 92
 tacaacgagg 10

<210> 93
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 93
 tggattggtc 10

<210> 94
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 94
 ctttctaccc 10

<210> 95
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 95
 ttttggctcc 10

<210> 96
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

```
<210> 97
<211> 10
<212> DNA
<213> Artificial Sequence
```

```
<400> 97
tcgatacagg                                     10
```

```
<210> 98
<211> 10
<212> DNA
<213> Artificial Sequence
```

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

```
<400> 98
ggtactaagg                                     10
```

```
<210> 99
<211> 10
<212> DNA
<213> Artificial Sequence
```

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

```
<400> 99
agtctatgcg                                     10
```

```
<210> 100
<211> 10
<212> DNA
<213> Artificial Sequence
```

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

```
<400> 100
ctatccatgg                                     10
```

```
<210> 101
<211> 10
```

<212> DNA
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 101
 tctgtccaca

10

<210> 102
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 102
 aagaggggtac

10

<210> 103
 <211> 10
 <212> DNA
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 103
 cttcaacctc

10

<210> 104
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 104
 gctcctcttg ccttaccaac

20

<210> 105
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> PCR primer for amplification from breast cancer
 tumor cDNA

20090401 16:00:00

<400> 105
 gtaagtcgag cagtgtgatg 20

 <210> 106
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 106
 gtaagtcgag cagtctgatg 20

 <210> 107
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 107
 gacttagtgg aaagaatgta 20

 <210> 108
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 108
 gtaattccgc caaccgtagt 20

 <210> 109
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 109
 atggttgatc gatagtggaa 20

 <210> 110
 <211> 20

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 114
 agcatgttga gccagacac 20

 <210> 115
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 115
 gacaccttgt ccagcatctg 20

 <210> 116
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 116
 tacgctgcaa cactgtggag 20

 <210> 117
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 117
 cgttagggtc tctatccact 20

 <210> 118
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 118
 agactgactc atgtccccta 20

 <210> 119
 <211> 20

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

```
<210> 120
<211> 20
<212> DNA
<213> Artificial Sequence
```

```
<400> 120
caagattcca taggctgacc                20
```

```
<210> 121
<211> 20
<212> DNA
<213> Artificial Sequence
```

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 121
acgtactggg cttgaaggtc 20

```
<210> 122
<211> 20
<212> DNA
<213> Artificial Sequence
```

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 122
gacgcttggc cacttgacac 20

```
<210> 123
<211> 20
<212> DNA
<213> Artificial Sequence
```

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 123
 gtatcgacgt agtggtctcc 20

<210> 124
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 124
 tagtgacatt acgacgctgg 20

<210> 125
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 125
 cgggtgatgc ctcctcaggc 20

<210> 126
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 126
 atggctattt tcgggggctg aca 23

<210> 127
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 127
 ccggtatctc ctcgtgggta tt 22

<210> 128
 <211> 18

<212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 128
 ctgcctgagc cacaaatg 18

<210> 129
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 129
 ccggaggagg aagctagagg aata 24

<210> 130
 <211> 14
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 130
 tttttttttt ttag 14

<210> 131
 <211> 18
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Predicited Th Motifs (B-cell epitopes)

<400> 131
 Ser Ser Gly Gly Arg Thr Phe Asp Asp Phe His Arg Tyr Leu Leu Val
 1 5 10 15
 Gly Ile

<210> 132
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Predicited Th Motifs (B-cell epitopes)

<221> VARIANT

<222> 13

<223> Xaa = Any Amino Acid

<400> 132

Gln	Gly	Ala	Ala	Gln	Lys	Pro	Ile	Asn	Leu	Ser	Lys	Xaa	Ile	Glu	Val
1				5				10						15	
Val	Gln	Gly	His	Asp	Glu										
			20												

<210> 133

<211> 23

<212> PRT

<213> Artificial Sequence

<220>

<223> Predicited Th Motifs (B-cell epitopes)

<400> 133

Ser	Pro	Gly	Val	Phe	Leu	Glu	His	Leu	Gln	Glu	Ala	Tyr	Arg	Ile	Tyr
1				5				10						15	
Thr	Pro	Phe	Asp	Leu	Ser	Ala									
			20												

<210> 134

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Predicited HLA A2.1 Motifs (T-cell epitopes)

<400> 134

Tyr	Leu	Leu	Val	Gly	Ile	Gln	Gly	Ala
1				5				

<210> 135

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Predicited HLA A2.1 Motifs (T-cell epitopes)

<400> 135

Gly	Ala	Ala	Gln	Lys	Pro	Ile	Asn	Leu
1				5				

<210> 136
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Predicited HLA A2.1 Motifs (T-cell epitopes)

 <221> VARIANT
 <222> 5
 <223> Xaa = Any Amino Acid

<400> 136
 Asn Leu Ser Lys Xaa Ile Glu Val Val
 1 5

<210> 137
 <211> 9
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Predicited HLA A2.1 Motifs (T-cell epitopes)

<400> 137
 Glu Val Val Gln Gly His Asp Glu Ser
 1 5

<210> 138
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Predicited HLA A2.1 Motifs (T-cell epitopes)

<400> 138
 His Leu Gln Glu Ala Tyr Arg Ile Tyr
 1 5

<210> 139
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Predicited HLA A2.1 Motifs (T-cell epitopes)

<400> 139
 Asn Leu Ala Phe Val Ala Gln Ala Ala

1

5

<210> 140
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Predicited HLA A2.1 Motifs (T-cell epitopes)

<400> 140
 Phe Val Ala Gln Ala Ala Pro Asp Ser
 1 5

<210> 141
 <211> 9388
 <212> DNA
 <213> Homo sapiens

<400> 141
 gctcgcggcc gcgagctcaa ttaaccctca ctaaagggag tcgactcgat cagactgtta 60
 ctgtgtctat gtagaaagaa gtagacataa gagattccat tttgttctgt actaagaaaa 120
 attcttctgc cttgagatgc tgtaaactctg taaccctagc cccaaccctg tgctcacaga 180
 gacatgtgct gtgttgactc aaggttcaat ggatttaggg ctatgctttg ttaaaaaagt 240
 gcttgaagat aatatgcttg ttaaaagtca tcaccattct ctaatctcaa gtaccaggg 300
 acacaataca ctgcggaagg ccgcagggac ctctgtctag gaaagccagg tattgtccaa 360
 gatttctccc catgtgatag cctgagatat ggcctcatgg gaagggttaag acctgactgt 420
 cccccagccc gacatcccc agcccgacat cccccagccc gacacccgaa aagggtctgt 480
 gctgaggagg attagtaaaa gaggaaggcc tctttgcagt tgaggtaaga ggaaggcatc 540
 tgtctcctgc tcgtccctgg gcaatagaat gtcttggtgt aaaaccgat tgtatgttct 600
 acttactgag ataggagaaa acatccttag ggctggagggt gagacacgct ggcggcaata 660
 ctgctcttta atgcaccgag atgtttgtat aagtgcacat caaggcacag cacctttcct 720
 taaacttatt tatgacacag agacctttgt tcacgttttc ctgctgacct tctcccaact 780
 attaccctat tggcctgcca catccccctc tccgagatgg tagagataat gatcaataaa 840
 tactgaggga actcagagac cagtgtccct gtaggtctct cgtgtgctga gcgccggtcc 900
 cttgggtca cttttctttc tctatacttt gtctctgtgt ctctttcttt tctcagtctc 960
 tcgttccacc tgacgagaaa taccacaggg tgtggagggg caggccaccc cttcaataat 1020
 ttactagcct gttcgtgac aacaagactg gtggtgcaga aggttgggtc ttggtgttca 1080
 ccgggtggca ggcattggcc aggtgggagg gtctccagcg cctggtgcaa atctccaaga 1140
 aagtgcagga aacagacca aggttgattg taaattttga tttggcggc caggtagcca 1200
 ttccagcgca aaaatgcgca ggaaagcttt tgctgtgctt gtaggcagggt aggccccaag 1260
 cacttcttat tggctaagt ggaggggaacc tgcacatoca ttggctgaaa tctccgtcta 1320
 tttgaggctg actgagcgcg ttccctttctt ctgtgttgcc tggaaacgga ctgtctgcct 1380
 agtaacatct gatcacgttt cccattggcc gccgtttccg gaagcccgcc ctcccatttc 1440
 cggaagcctg gcgcaagggt ggtctgcagg tggcctccag gtgcaaagt ggaagtgtga 1500
 gtcctcagtc ttgggtctatt cggccacgtg cctgccggac atgggacgct ggagggtcag 1560
 cagcgtggag tcttgccctt ttgcgtccac ggggtgggaaa ttggccattg ccacggcggg 1620
 aactgggact caggctgccc cccggccgtt tctcatccgt ccaccggact cgtgggcgct 1680
 cgcactggcg ctgatgtagt ttctgacct ctgaccgta ttgtctccag attaaaggta 1740
 aaaacggggc tttttcagcc cactcgggta aaacgccttt tgatttctag gcagggtgtt 1800
 tgttgcacgc ctgggagggg gtgaccgcga gggttagggt tattaataa cattcctgg 1860
 ttatgttatg tttataataa agcaccocaa cctttacaaa atctcaactt ttgccagttg 1920

tattatttag	tggaactgtct	ctgataagga	cagccagtta	aaatggaatt	ttgttgttgc	1980
taattaaacc	aatttttagt	tttgggtgtt	gtcctaatag	caacaacttc	tcaggcttta	2040
taaaaccata	tttcttgggg	gaaatttctg	tgtaaggcac	agcgagttag	tttgggaattg	2100
ttttaaagga	agtaagttcc	tggttttgat	atcttagtag	tgtaatgccc	aacctgggtt	2160
ttactaacc	tgtttttaga	ctctcccttt	ccttaaataca	cctagccttg	tttccacctg	2220
aattgactct	cccttagcta	agagcgccag	atggactcca	tcttggctct	ttcactggca	2280
gcccccttct	caaggactta	acttgtgcaa	gctgactccc	agcacatcca	agaatgcaat	2340
taactgttaa	gatactgtgg	caagctatat	ccgcagttcc	gaggaattca	tccgattgat	2400
tatgcccata	agccccgcgt	ctatcacctt	gtaataatct	taaaagccct	gcacctggaa	2460
ctattaactt	tcctgtaacc	atztatcctt	ttaacttttt	tgcttacttt	atctctgtaa	2520
aattgtttta	actagacctc	ccctccccct	tctaaaccaa	agtataaaaag	aagatctagc	2580
cccttcttca	gagcggagag	aattttgagc	attagccatc	tcttggcggc	cagctaaata	2640
aatggacttt	taatttgtct	caaagtgtgg	cgttttctct	aactcgctca	ggtacgacat	2700
ttggaggccc	cagcgagaaa	cgtcaccggg	agaaacgtca	ccgggcgaga	gcccggccccg	2760
ctgtgtgctc	ccccggaagg	acagccagct	tgtagggggg	agtgccacct	gaaaaaaaaa	2820
tttccagggtc	cccaaagggt	gaccgtcttc	cggaggacag	cggatcgact	accatgcggg	2880
tgcccaccaa	aattccacct	ctgagtcctc	aactgctgac	cccgggttca	ggtaggtcag	2940
atttgacttt	ggttctggca	gaggaagcg	accctgatga	gggtgtccct	cttttgactc	3000
tgcccatttc	tctaggatgc	tagagggtag	agccctggtt	ttctgttaga	cgcctctgtg	3060
tctctgtctg	ggagggaagt	ggccctgaca	ggggccatcc	cttgagtcag	tccacatccc	3120
aggatgctgg	gggaactgag	cctggtttct	ggcagactgg	tctctctctc	tctctttttc	3180
tatctctaata	ctttccttgt	tcagggtttct	tggagaatct	ctgggaaaga	aaaaagaaaa	3240
actgttataa	actctgtgtg	aatggtgaat	gaatggggga	ggacaagggc	ttgcgcttgt	3300
cctccagttt	gtagctccac	ggcgaaagct	acggagttca	agtgggccct	cacctgcggt	3360
tccgtggcga	cctcataagg	cttaaggcag	catccggcat	agctcgatcc	gagccggggg	3420
tttataaccg	cctgtcaatg	ctaagaggag	cccaagtccc	ctaaggggga	gcggccaggc	3480
gggcactctga	ctgatcccat	cacgggaccc	cctccccctg	tttgtctaaa	aaaaaaaaaa	3540
gaagaaactg	tcataactgt	ttacatgccc	taggggtcaac	tgtttgtttt	atgtttattg	3600
ttctgttcgg	tgtctattgt	cttgttttagt	ggttgtcaag	gttttgcatt	tcaggacgtc	3660
gatattgccc	aagacgtctg	ggtaagaact	tctgcaaggt	ccttagtgct	gattttttgt	3720
cacaggagggt	taaaatttct	atcaatcatt	taggctggcc	accacagtcc	tgtcttttct	3780
gccagaagca	agtcagggtg	tgttacggga	atgagtgtaa	aaaaacattc	gctgtattgg	3840
gatttctggc	accatgatgg	ttgtatttag	attgtcatac	cccacatcca	ggttgattgg	3900
acctcctcta	aactaaactg	gtggtgggtt	caaaacagcc	accctgcaga	tttccctgtc	3960
cacctctttg	gtcattctgt	aacttttctt	gtgcccttaa	atagcacact	gtgtagggaa	4020
acctaccctc	gtactgcttt	acttgcgttt	gattcttact	ctgttctctc	gtggctactc	4080
tccatcttta	aaaaacgatcc	aagtggctct	tttctctctc	cctgccccct	acccacacac	4140
tctcgttttc	cagtgcgaca	gcaagttcag	cgtctccagg	acttggctct	gctctcactc	4200
cttgaaccct	taaaagaaaa	agctgggttt	gagctatttg	cctttgagtc	atggagacac	4260
aaaagggtatt	tagggtacag	atctagaaga	agagagagaa	cacctagatc	caactgaccc	4320
aggagatctc	gggctggcct	ctagtctctc	tccctcaatc	ttaaagctac	agtgatgtgg	4380
caagtgggat	ttagctgttg	tggtttttct	gctctttctg	gtcatgttga	ttctgttctt	4440
tcgatactcc	agccccccag	ggagtgaagt	tctctgtctg	tgctgggttt	gatatctatg	4500
ttcaaactct	attaaattgc	cttcaaaaaa	aaaaaaaaaa	gggaaacact	tcctcccagc	4560
cttgtaaggg	ttggagccct	ctccagttata	tgtctgcagaa	tttttctctc	ggtttctcag	4620
aggattatgg	agtccgcctt	aaaaaaggca	agctctggac	actctgcaaa	gtagaatggc	4680
caaagtttgg	agttgagtgg	ccccttgaag	ggtcaactgaa	cctcacaatt	gttcaagctg	4740
tgtggcgggt	tgttactgaa	actcccgcc	tccttgatca	gtttccctac	attgatcaat	4800
ggctgagttt	ggtcaggagc	accccttcca	tggctccact	catgcacat	tcataatttt	4860
acctccaagg	tcctcctgag	ccagaccgtg	ttttgcctc	gacctcagc	cggttcagct	4920
cgccctgtac	tgctctctc	tgaagaagag	gagagctctc	ctcaccagct	cccaccgct	4980
taaaaccagc	ctactccctt	agggctcatcc	catgtctctc	cggctatgtc	ccctgtaggc	5040
tcatcaccca	ttgcctcttg	gttgcaaccg	tgggtggagg	aagtagcccc	tctactacca	5100
ctgagagagg	cacaagtccc	tctgggtgat	gagtgctcca	cccccttctc	ggttttatgtc	5160

ccttctttct acttctgact tgtataattg gaaaacccat aatcctccct tctctgaaaa 5220
 gccccaggct ttgacctcac tgatggagtc tgtactctgg acacattggc ccacctggga 5280
 tgactgtcaa cagctccttt tgaccctttt cacctctgaa gagagggaaa gtatccaaag 5340
 agaggccaaa aagtacaacc tcacatcaac caataggccg gaggaggaag ctagaggaat 5400
 agtgattaga gacccaattg ggacctaat ggacccaaa tttctcaagt ggaggagaa 5460
 cttttgacga tttccaccgg tatctctctg tgggtattca gggagctgct cagaaacct 5520
 taaacttgct taaggcgact gaagtcgtcc aggggcatga tgagtcacca ggagtgttt 5580
 tagagcacct ccaggaggct tatcgattt acacccttt tgacctggca gccccgaaa 5640
 atagccatgc tcttaatttg gcatttgtgg ctccaggcagc ccagatagt aaaaggaaac 5700
 tccaaaaact agagggattt tgctggaatg aataccagtc agcttttaga gatagcctaa 5760
 aagggttttg acagtcaaga ggttgaaaaa caaaaacaag cagctcaggc agctgaaaaa 5820
 agccactgat aaagcatcct ggagtatcag agtttactgt tagatcagcc tcatgtgact 5880
 tccccccca catggtgttt aaatccagct acactacttc ctgactcaa ctccactatt 5940
 cctgttcacg actgtcagga actgttgaa actactgaaa ctggccgacc tgatcttcaa 6000
 aatgtgcccc taggaaaggt ggatgccacc gtgttcacag acagtagcag cttcctcgag 6060
 aagggactac gaaaggccgg tgcagctgtt accatggaga cagatgtgt gtgggctcag 6120
 gctttaccag caaacacctc agcacaaga gctgaattga tcgccctcac tcaggctctc 6180
 cgatggggta aggatattaa cgttaacact gacagcaggt acgcctttgc tactgtgcat 6240
 gtacgtggag ccatctacca ggagcgtgg tactcacct cagcaggtg ctgtaatcca 6300
 ctgtaaagga catcaaaagg aaaacacggc tgttgcccg ggtaaccaga aagctgattc 6360
 agcagctcaa gatgcagtgt gactttcagt cacgcctcta aacttgctgc ccacagtctc 6420
 ctttccacag ccagatctgc ctgacaatcc cgcatactca acagaagaag aaaactggcc 6480
 tcagaactca gagccaataa aaatcaggaa ggttggtgga ttcttctga ctctagaatc 6540
 ttcatatccc gaactcttgg gaaaacttta atcagtcacc tacagtctac caccatttta 6600
 ggaggagcaa agctacctca gctcctccgg agcctgttta agatcccca tcttcaaagc 6660
 ctaacagatc aagcagctct ccggtgcaca acctgcgccc aggtaaatgc caaaaaaggt 6720
 cctaaacca gcccaggcca ccgtctccaa gaaaactcac caggagaaaa gtgggaaatt 6780
 gactttacag aagtaaaacc acacogggct gggtaaaaat accttctagt actggtagac 6840
 accttctctg gatggactga agcatttgc accaaaaacg aaactgtcaa tatggtagt 6900
 aagtttttac tcaatgaaat catccctoga cgtgggctgc ctgttgccat agggctctgat 6960
 aatggaccgg ctttcgcctt gtctatagtt tagtcagtca gtaaggcgtt aaacattcaa 7020
 tggaagctcc attgtgcta tcgacccag agctctgggc aagtagaacg catgaactgc 7080
 accctaaaaa acactcttac aaaattaatc ttagaaaccg gtgtaaattg tgtaagtctc 7140
 cttcctttag ccctacttag agtaaggctc acccttact gggctgggtt cttacctttt 7200
 gaaatcatgt atgggagggc gctgcctatc ttgcctaagc taagagatgc ccaattggca 7260
 aaaatcatc aaactaattt attacagtac ctacagtctc cccaacaggt acaagatatc 7320
 atcctgccac ttgttcgagg aacccatccc aatccaatc ctgaacagac agggccctgc 7380
 cattcattcc cgcaggtga cctgttgttt gttaaaaagt tccagagaga aggactccct 7440
 cctgcttggga agagacctca caccgtcatc acgatgccaa cggctctgaa ggtggatggc 7500
 attcctgcgt ggattcatca ctccgcctc aaaaaggcca acggagccca actagaaaca 7560
 tgggtcccca gggctgggtc agggccctta aaactgcacc taagttgggt ttctgtcaaa cttatgtatc 7620
 gattaattct ttttcttaat ttgtgaaac aatgcatagc ttctgtcaaa cttatgtatc 7680
 ttaagactca atataacccc cttgttataa ctgaggaatc aatgatttga ttcccaaaa 7740
 acacaagtgg ggaatgtagt gtccaacctg gtttttacta accctgtttt tagactctcc 7800
 ctttccttta atcactcagc cttgtttcca cctgaattga ctctccctta gctaagagcg 7860
 ccagatggac tccatcttgg ctcttttact ggcagccgct tctcaagga ctttaactgt 7920
 gcaagctgac tcccagcaca tccaagaatg caattaactg ataagatact gtggcaagct 7980
 atatccgcag ttcccaggaa ttctgtccat tgattacacc caaaagcccc gcgtctatca 8040
 ccttgtaata atcttaagc ccctgcacct ggaactatta acgttctgt aaccatttat 8100
 ccttttaact ttttgcccta ctttatttct gtaaaattgt tttaactaga cccccctct 8160
 cttttctaaa ccaaagtata aaagcaaatc tagcccttc ttcaggccga gagaatttcg 8220
 agcgtagacc gtctctggc caccagctaa ataacggat tcttcatgtg tctcaaagt 8280
 tggcgtttct tctaactcgc tcaggtagc cctggtagt attttccca acgtcttatt 8340
 tttagggcac gtatgtagag taacttttat gaaagaaacc agttaaggag gttttgggat 8400

```

ttcctttatc aactgtaata ctggttttga ttattttattt atttatttat tttttttgag 8460
aaggagtttc actcttggtg cccaggctgg agtgcaatgg tgcgatcttg gctcactgca 8520
acttccgcct cccagggttca agcgattctc ctgcctcagc ctcgagagta gctgggatta 8580
taggcattgcg ccaccacacc cagctaattt tgtattttta gtaaagatgg ggtttcttca 8640
tgttgggtcaa gctgggtctgg aactccccgc ctcggtgat ctgcccgcct cggcctccga 8700
aagtgtctggg attacaggtg tgatccacca ccccagccg atttatatgt atataaatca 8760
cattcctcta accaaaatgt agtgtttctt tccatcttga atataggctg tagaccccg 8820
gggtatggga cattgttaac agtgagacca cagcagttt tatgtcatct gacagcatct 8880
ccaaatagcc ttcattggtt tcaactgctt ccaagacaat tccaaataac acttcccagt 8940
gatgacttgc tacttgctat tgttacttaa tgtgttaagg tggctgttac agacactatt 9000
agtatgtcag gaattacacc aaaatttagt ggctcaaaca atcattttat tatgtatgtg 9060
gattctcatg gtcagggtcag gatttcagac agggcacaag ggtagccac ttgtctctgt 9120
ctatgatgtc tggcctcagc acaggagact caacagctgg ggtctgggac catttgagg 9180
cttgttccct cacatctgat acctggcttg ggatgttggg agaggggtg agctgagact 9240
gagtgcctat atgtagtgtt tccatatggc cttgacttcc ttacagcctg gcagcctcag 9300
ggtagtcaga attcttagga ggcacagggc tccagggcag atgctgaggg gtctttttatg 9360
aggtagcaca gcaaateccac ccaggatc 9388

```

<210> 142
 <211> 419
 <212> DNA
 <213> Homo sapiens

```

<400> 142
tgtaagtcga gcagtgtgat ggaaggaatg gtctttggag agagcatatc catctcctcc 60
tcaactgcctc ctaatgtcat gaggtacact gagcagaatt aaacagggtg gtcttaacca 120
cactattttt agctaccttg tcaagetaat ggtaaagaa cacttttggg ttacacttgt 180
tgggtcatag aagttgcttt ccgccatcac gcaataagtt tgtgtgtaat cagaaggagt 240
taccttatgg tttcagtgtc attctttagt taacttggga gctgtgtaat ttaggctttg 300
cgtattattt cacttctgtt ctccacttat gaagtgattg tgtgttcgcg tgtgtgtgcg 360
tgcgcatgtg cttccggcag ttaacataag caaataccac acatcacact gctcgactt 419

```

<210> 143
 <211> 402
 <212> DNA
 <213> Homo sapiens

```

<400> 143
tgtaagtcga gcagtgtgat gtccactgca gtgtgttgct gggaacagtt aatgagcaaa 60
ttgtatacaa tggctagtac attgaccggg atttgttgaa gctgggtgagt gttatgactt 120
agcctgttag actagtctat gcacatggct ctgggtcaact accgctctct catttctcca 180
gataaatccc ccatgcttta tattctcttc caaacatact atcctcatca ccacatagtt 240
cctttgttaa tgctttgttc tagactttcc cttttctgtt ttcttattca aacctatata 300
tctttgcata gattgtaaat tcaaatgccc tcagggtgca ggcagttcat gtaagggagg 360
gaggctagcc agtgagatct gcacacact gctcgactta ca 402

```

<210> 144
 <211> 224
 <212> DNA
 <213> Homo sapiens

<400> 144

```

tcgggtgatg cctcctcagg ccaagaagat aaagcttcag acccctaaca catttccaaa 60
aaggaagaaa ggagaaaaaa gggcatcacc cccgttccga agggtcaggg aggaggaaat 120
tgagggtgat tcacgagttg cggacaactc ctttgatgcc aagcgagggt cagccggaga 180
ctggggagag cgagccaatc aggttttgaa gttcctctca gtgc 224

```

```

<210> 145
<211> 111
<212> DNA
<213> Homo sapiens

```

```

<400> 145
agccatttac caccatcca caaaaaaaaa aaaaaaaaaa aaaaatatca aggaataaaa 60
atagactttg aacaaaaagg aacatttgct ggcctgagga ggcaccacc g 111

```

```

<210> 146
<211> 585
<212> DNA
<213> Homo sapiens

```

```

<400> 146
tagcatgttg agcccagaca cttgtagaga gaggaggaca gttagaagaa gaagaaaagt 60
ttttaaatgc tgaaagttac tataagaaag ctttggcttt ggatgagact tttaaagatg 120
cagaggatgc tttgcagaaa cttcataaat atatgcaggg gattccttat ttctccttag 180
aaatttagtg atatttgaaa taatgcccaa acttaatttt ctctgagga aaactattct 240
acattactta agtaaggcat tatgaaaagt ttcttttttag gtatagtttt tcctaatttg 300
gtttgacatt gcttcatagt gcctctgttt ttgtccataa tcgaaagtaa agatagctgt 360
gagaaaacta ttacctaaat ttggtatgtt gttttgagaa atgtccttat agggagctca 420
cctggtgggt tttaaattat tggtgctact ataattgagc taattataaa aacctttttg 480
agacatattt taaattgtct ttctctgtaa tactgatgat gatgttttct catgcatttt 540
cttctgaatt gggaccattg ctgctgtgtc tgggctcaca tgcta 585

```

```

<210> 147
<211> 579
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 383, 453, 465, 501
<223> n = A,T,C or G

```

```

<400> 147
tagcatgttg agcccagaca ctgggcagcg ggggtggcca cggcagctcc tgccgagccc 60
aagcgtgttt gtctgtgaag gaccctgacg tcacctgcca ggctagggag gggtcattgt 120
ggagtgaatg ttcaccgact ttgcgaggag tgtgcagaag ccagggtgcaa cttgggtttgc 180
ttgtgttcat caccctcaa gatatgcaca ctgctttcca aataaagcat caactgtcat 240
ctccagatgg ggaagacttt ttctccaacc agcaggcagg tccccatcca ctccagacacc 300
agcacgtcca cttctcggg cagcaccacg tcctccacct tctgttggtg caagggtgatg 360
atgtcagcaa agccgttctg cagaccacg tgccccgtgt gctgtgccat ctactggcc 420
tccaccgctg acaccgctc aggcgcgca tantgtgcac agaanaaatg atgatccagt 480
cccacagccc acgtccaaga ngactttatc cgtcagggat tctttattct gcaggatgac 540
ctgtggtatt aattgttcgt gtctgggctc aacatgcta 579

```

```

<210> 148

```

<211> 249
 <212> DNA
 <213> Homo sapiens

<400> 148
 tgacaccttg tccagcatct gcaagccagg aagagagtcc tcaccaagat cccacccccg 60
 ttggcaccag gatcttggac ttccaatctc cagaactgtg agaaataagt atttgtcgct 120
 aaataaatct ttgtgggttc agatatttag ctatagcaga tcaggctgac taagagaaac 180
 ccataagag ttacatactc attaatctcc gtctctatcc ccaggctctca gatgctggac 240
 aaggtgtca 249

<210> 149
 <211> 255
 <212> DNA
 <213> Homo sapiens

<400> 149
 tgacaccttg tccagcatct gctatcttgt gactttttta taatagccat tctgactggt 60
 gtgagatggt aactcattgt gggtttggtc tgcattttct taatgatcag tgatattaag 120
 ctttttttaa atatgcttgt tgaccacatg tatatcatct tttgagaagt gtctgttcat 180
 atcctttgcc cactttttta tttttttatc ttgtaaaatt gtttaatttc cttacagatg 240
 ctggacaagg tgtca 255

<210> 150
 <211> 318
 <212> DNA
 <213> Homo sapiens

<400> 150
 ttacgctgca acactgtgga ggccaagctg ggatcacttc ttcattctaa ctggagagga 60
 gggaagttca agtccagcag aggggtgggtg ggtagacagt ggcaactcaga aatgtcagct 120
 ggaccctgt ccccgcatag gcaggacagc aaggctgtgg ctctccaggg ccagctgaag 180
 aacaggacac tgtctccgct gccacaaagc gtcagagact cccatctttg aagcacggcc 240
 ttcttggtct tccctgactt ccctgttctg ttagagacct gggttatagac aaggcttctc 300
 cacagtgttg cagcgtaa 318

<210> 151
 <211> 323
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 2, 7, 10, 13, 14, 23, 26, 32, 44, 54, 56, 67, 74, 75, 81,
 87, 104, 105, 109, 111, 120, 123, 124, 136, 137, 138, 151,
 155, 162, 168, 171, 176, 184, 186, 196, 215, 231, 239, 252,
 265, 288, 318
 <223> n = A,T,C or G

<400> 151
 tnacgngcn acnntgtaga ganggnaagg cnttccccac attnccccctt catnanagaa 60
 ttattcnacc aagnntgacc natgccnttt atgacttaca tgcnnactnc ntaatctgtn 120
 tcnngcctta aaagcnnntc cactacatgc ntcancactg tntgtgtnac ntcatnaact 180
 gtcngnaata ggggcncata actacagaaa tgcanttcat actgcttcca ntgccatcng 240

```
cgtgtggcct tncctactct tcttntatct caagtagcat ctctggantg cttccccact 300
ctccacattg ttgcagcnat aat 323
```

```
<210> 152
<211> 311
<212> DNA
<213> Homo sapiens
```

```
<400> 152
tcaagattcc ataggctgac cagtccaagg agagttgaaa tcatgaagga gagtctatct 60
ggagagagct gtagttttga gggttgcaaa gacttaggat ggagttgggtg ggtgtgggta 120
gtctctaagg ttgattttgt tcataaattt catgccttga atgccttgct tgcctcacc 180
tgggtccaagc cttagtgaac acctaaaagt ctctgtcttc ttgctctcca aacttctcct 240
gaggatttcc tcagattgtc tacattcaga tcgaagccag ttggcaaaca agatgcagtc 300
cagagggtca g 311
```

```
<210> 153
<211> 332
<212> DNA
<213> Homo sapiens
```

```
<400> 153
caagattcca taggctgacc aggaggctat tcaagatctc tggcagttga ggaagtctct 60
ttaagaaaat agtttaaca atttgtaaa atttttctgt cttacttcat ttctgtagca 120
gttgatatct ggctgtcctt tttataatgc agagtgggaa ctttcctac catgtttgat 180
aaatgttgct caggctccat tgccaataat gtgtgtgcca aaatgcctgt ttagttttta 240
aagacggaac tccacccttt gcttggctct aagtatgtat ggaatgttat gataggacat 300
agtagtagcg gtggtcagcc tatggaatct tg 332
```

```
<210> 154
<211> 345
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 154, 224, 297, 330
<223> n = A,T,C or G
```

```
<400> 154
tcaagattcc ataggctgac ctggacagag atctcctggg tctggcccag gacagcaggc 60
tcaagctcag tggagaaggt ttccatgacc ctccagattcc cccaaacctt ggattgggtg 120
acattgcatc tcctcagaga gggaggagat gtangtctgg gcttcacag ggacctgta 180
ttttaggatc aggttaccgc tggcctgagg cttggatcat tcanagcctg ggggtggaat 240
ggctggcagc ctgtggcccc attgaaatag gctctggggc actccctctg ttcctanttg 300
aacttgggta aggaacagga atgtggtcan cctatggaat cttga 345
```

```
<210> 155
<211> 295
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
```

<222> 46, 199, 252, 266

<223> n = A,T,C or G

<400> 155

```
gacgcttggc cacttgacac attaaacagt tttgcataat cactancatg tattttctagt 60
ttgctgtctg ctgtgatgcc ctgccctgat tctctggcgt taatgatggc aagcataatc 120
aaacgctggt ctgttaattc caagttataa ctggcattga ttaaagcatt atctttcaca 180
actaaactgt tcttcatana acagcccata ttattatcaa attaagagac aatgtattcc 240
aatatccttt anggccaaata tatttnatgt cccttaatta agagctactg tccgt      295
```

<210> 156

<211> 406

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 172, 178, 332, 338, 342, 381, 400, 402

<223> n = A,T,C or G

<400> 156

```
gacgcttggc cacttgacac tgcagtggga aaaccagcat gagccgctgc cccaaggaa 60
cctcgaagcc caggcagagg accagccatc ccagcctgca ggtaaagtgt gtcacctgtc 120
aggtgggctt ggggtgagtg ggtgggggaa gtgtgtgtgc aaagggggtg tnaatgtnta 180
tgcgtgtgag catgagtgat ggctagtgtg actgcatgtc agggagtgtg aacaagcgtg 240
cgggggtgtg tgtgcaagtg cgtatgcata tgagaatatg tgtctgtgga tgagtgcatt 300
tgaaagtctg tgtgtgtgcg tgtggtcatg anggtaantt antgactgcg caggatgtgt 360
gagtgtgcat ggaacactca ntgtgtgtgt caagtggccn ancgtc      406
```

<210> 157

<211> 208

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 115, 119, 182, 187

<223> n = A,T,C or G

<400> 157

```
tgacgcttgg ccacttgaca cactaaaggg tgttactcat cactttcttc tctcctcggt 60
ggcatgtgag tgcattctatt cacttggcac tcatttggtt ggcagtgact gtaanccana 120
tctgatgcat acaccagctt gtaaattgaa taaatgtctc taatactatg tgctcacaat 180
anggtanggg tgaggagaag gggagaga      208
```

<210> 158

<211> 547

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 235

<223> n = A,T,C or G

cttcaacctc	cttcaacctc	cttcaacctc	ctggattcaa	acaatcatcc	cacctcagac	60
tccttagtag	ctgagactac	agactcacgc	cactacatct	ggctaaaattt	ttgtagagat	120
agggtttcat	catgttgccc	tggtgtgtct	caaactcctg	acctcaagca	atgtgcccac	180
ctcagcctcc	caaagtgtctg	ggattacagg	cataagccac	catgcccggt	ccatnttttaa	240
tctttcctac	cacattctta	ccacactttc	ttttatgttt	agatacataa	atgcttacca	300
ttatgataca	attgccacaa	gtattaagac	agtaacatgc	tgcacagggt	tgtagcctag	360
gaacagtagg	caataccaca	tagcttaggt	gtgtggtaga	ctataccatc	taggtttgtg	420
taagttacac	tttatgtctg	ttacacaatg	acaaaaccat	ctaattgatgc	attttctcaga	480
atgtatcctt	gtcagtaagc	tatgatgtac	agggaacact	gcccgaaggac	acagatattg	540
tacctgt						547

<213> Homo sapiens

gctcctctt	ccttaccaac	tcacccagta	tgtcagcaat	tttatcrgct	ttacctacga	60
aacagcctgt	atccaaacac	ttaacacact	cacctgaaaa	gttcaggcaa	caatcgccct	120
ctcatgggtc	tctctgctcc	agttctgaac	ctttctcttt	tcctagaaca	tgcatttarg	180
tcgatagaag	ttcctctcag	tgc				203

<213> Homo sapiens

tgtaagtcga	gcagtgat	gggtggaaca	gggttgtaag	cagtaattgc	aaactgtatt	60
taaacataa	taataatatt	tagcatttat	agagcacttt	atatcttcaa	agtacttgca	120
aacattayct	aattaaatac	cctctctgat	tataatctgg	atacaaatgc	acttaaaactc	180
aggacagggt	catgagaraa	gtatgcattt	gaaagttggt	gctagctatg	ctttaaaaaac	240
ctatacaatg	atgggraagt	tagagttcag	attctgttgg	actgtttttg	tgcaatttcag	300
ttcagcctga	tggcagaatt	agatcatatc	tgactcgcg	gactytgctt	gataacttat	360
cactgaaatc	tgagtgttga	tcacacacac	gctcgactta	ca		402

<213> Homo sapiens

```

agcatgttga gccagacac tgaccaggag aaaaaccaac caatagaaac acgccagac 60
actgaccagg agaaaaacca accaataaaa acaggcccgg acataagaca aataataaaa 120
ttagcggaca aggacatgaa aacagctatt gtaagagcgg atatagtggg gtgtgtctgg 180
gtcaacatg cta                                     193

```

<213> Homo sapiens

<400> 162
 tgttgagccc agacactgac caggagaaaa accaaccaat aaaaacaggc ccggacataa 60
 gacaaataat aaaattagcg gacaaggaca tgaaaacagc tattgtaaga gcggatatag 120
 tgggtgtgtgt ctgggctcaa catgcta 147

<210> 163
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 163
 tagcatgttg agcccagaca caaatctttc cttaagcaat aaatcatttc tgcataatggt 60
 tttaaaacca cagctaagcc atgattattc aaaaggacta ttgtattggg tatttttgatt 120
 tgggttctta tctccctcac attatcttca tttctatcat tgacctctta tcccagagac 180
 tctcaaactt ttatgtttata caaatcacat tctgtctcaa aaaatatctc acccacttct 240
 cttctgtttc tgcgtgtgta tgtgtgtgtg tgtgtgtctg ggctcaacat gcta 294

<210> 164
 <211> 412
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 292
 <223> n = A,T,C or G

<400> 164
 cgggattggc tttgagctgc agatgctgcc tgtgaccgca cccggcgtgg aacagaaagc 60
 cacctggctg caagtgcgcc agagccgccc tgactacgtg ctgctgtggg gctggggcgt 120
 gatgaactcc accgccctga aggaagccca ggccaccgga taccctcccg acaagatgta 180
 cggcgtgtgg tgggcccgtg cggagcccga tgtgcgtgac gtgggcgaag gcgccaaggg 240
 ctacaacgcg ctggctctga acggctacgg cacgcagtcc aaggtgatcc angacatcct 300
 gaaacacgtg caccgacaagg gccagggcac ggggcccaaa gacgaagtgg gctcgggtgct 360
 gtacaccgcg ggcgtgatca tccagatgct ggacaagggtg tcaatcacta at 412

<210> 165
 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 165
 ttgacacctt gtccagcatc tgcactctgat gagagcctca gatggctacc actaatggca 60
 gaaggcaaag gagaacaggc attgtatggc aagaaaggaa gaaagagaga ggggagaaag 120
 gtgctagggt cttttcaaca accagttctt gatggaactg agagtaagag ctcaaggcca 180
 ggtgtggtga ctccaaccag taatcccaac attttaggag gctgaggcag gcagatgtct 240
 tgaccccatg agtttgtgac cagcctgaac aacatcatga gactccatct ctacaataat 300
 taaaaaatt aatcaggcat tgtggtatgc cctgtagtcc cagatgctgg acaagggtgc 360
 a 361

<210> 166
 <211> 427
 <212> DNA
 <213> Homo sapiens

<400> 166
 twgactgact catgtcccct acacccaact atcttctcca ggtggccagg catgatagaa 60
 tctgactcctg acttagggga atattttctt tttacttccc atcttgattc cctgccgggtg 120
 agtttctctgg ttcagggtta gaaaggagct caggccaaag taatgaacaa atccatcctc 180
 acagacgtac agaataagag aacwtggacw tagccagcag aacmcaaktg aaamcagaac 240
 mcttamctag gatracaamc mcrraratar ktgcycmcmc wtataataga aaccaaactt 300
 gtatctaatt aaatatttat ccacygtcag ggcatttagtg gttttgataa atacgctttg 360
 gctaggattc ctgagggttag aatggaaraa caattgcamc gagggtaggg gacatgagtc 420
 aktctaa 427

<210> 167
 <211> 500
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 288, 303, 318, 326
 <223> n = A,T,C or G

<400> 167
 aacgtcgcat gctcccggcc gccatggccg cgggatagac tgactcatgt cccctaagat 60
 agaggagaca cctgctaggt gtaaggagaa gatgggttagg tctacggagg ctccagggtg 120
 ggagtagttc cctgctaagg gagggtagac tgttcaacct gttcctgctc cggcctccac 180
 tatagcagat gcgagcagga gtaggagaga gggaggttaag agtcagaagc ttatgttgtt 240
 tatgccccga aacgccrtat cgggggcagc cragttatta ggggacantr tagwyartcw 300
 agntagcatc caaagcgngg gagttntccc atatggttgg acctgcaggc ggccgcatta 360
 gtgattagca tgtgagcccc agacacgcat agcaacaagg acctaaactc agatcctgtg 420
 ctgattactt aacatgaatt attgtattta ttaacaact ttgagttatg aggcataatta 480
 ttaggtccat attacctgga 500

<210> 168
 <211> 358
 <212> DNA
 <213> Homo sapiens

<400> 168
 ttcacgtctc ggtgactcaa gcctgtaatc ccagaacttt gggaggccga ggggagcaga 60
 tcacctgagg ttgggagttt gagaccagcc tggccaacat ggtgacaacc cgtctctgct 120
 aaaaatacaa aaattagcca agcatggtgg catgcacttg taatcccagc tactcgggag 180
 gctgaggcag gagaatcact tgaggccagg aggcagaggt tgcagtgagg cagaggttga 240
 gatcatgcca ctgcactcca gcctgggcaa cagagtaaga ctccatctca aaaaaaaaaa 300
 aaaaaaagaa tgatcagagc cacaaatata gaaaaccttg agtcaccgag cgatgaaa 358

<210> 169
 <211> 1265
 <212> DNA
 <213> Homo sapiens

<400> 169
 ttctgtccac accaatctta gagctctgaa agaatttgtc tttaaatata ttttaatagt 60
 aacatgtatt ttatggacca aattgacatt ttcgactatt ttttcccaaa aaaagtcagg 120
 tgaatttcag cacactgagt tgggaatttc ttatccaga agwcggcacg agcaatttca 180

tattttattta agattgattc catactccgt tttcaaggag aatccctgca gtctccttaa 240
 aggtagaaca aatactttct attttttttt caccattgtg ggattggact ttaagaggtg 300
 actctaaaaa aacagagaac aaatatgtct cagttgtatt aagcacggac ccatattatc 360
 atattcactt aaaaaaatga tttcctgtgc accttttggc aacttctctt ttcaatgtag 420
 ggaaaaactt agtcaccctg aaaaccaca aaataaataa aacttgtaga tgtgggcaga 480
 argtttgggg gtggacattg tatgtgttta aattaaacc tgtatcactg agaagctgtt 540
 gtatgggtca gagaaaatga atgcttagaa gctgttcaca tcttcaagag cagaagcaaa 600
 ccacatgtct cagctatatt attatttatt ttttatgcat aaagtgaatc atttcttctg 660
 tattaatttc caaagggttt taccctctat ttaaatgctt tgaaaaacag tgcattgaca 720
 atgggttgat atttttcttt aaaagaaaaa tataattatg aaagccaaga taatctgaag 780
 cctgttttat tttaaaactt tttatgttct gtggttgatg ttgtttgttt gtttgtttct 840
 attttgttgg ttttttactt tgtttttgt tttgtttgt tttggtttdg catactacat 900
 gcagtttctt taaccaatgt ctgtttggct aatgtaatta aagttgttaa tttatatgag 960
 tgcatttcaa ctatgtcaat ggtttcttaa tatttattgt gtagaagtac tggtaatttt 1020
 tttattttaca atatgtttta agagataaca gtttgatatg ttttcatgtg tttatagcag 1080
 aagttatttta tttctatggc attccagcgg atattttggt gtttgcgagg catgcagtca 1140
 atattttgta cagtttagtg acagtattca gcaacgcctg atagcttctt tggccttatg 1200
 ttaaaaaaaa agacctgttt gggatgtaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260
 aaaaaa 1265

<210> 170
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 170
 tgtaagtcga gcagtgatg gacgatattc ttcttattaa tgtggtaatt gaacaaatga 60
 tctgtgatac tgatcctgag ctaggaggcg ctgttcagtt aatgggactt ctctgtactc 120
 taattgatcc agagaacatg ctggctacaa ctaataaaac cgaaaaaagt gaattttctaa 180
 attttttcta caaccattgt atgcatgttc tcacagcacc acttttgacc aatacttcag 240
 aagacaaatg tgaaaaggat aatatagttg gatcaaacaa aaacaacaca atttgtcccg 300
 ataattatca aacagcacag ctactgcct taattttaga gttactcaca ttttgtgtgg 360
 aacatcacac tgctcgactt aca 383

<210> 171
 <211> 383
 <212> DNA
 <213> Homo sapiens

<400> 171
 tgggcacctt caatatcgca agttaaaaat aatgttgagt ttattatact tttgacctgt 60
 ttagctcaac aggggtgaagg catgtaaaga atgtggactt ctgaggaatt ttctttttaa 120
 aagaacataa tgaagtaaca ttttaattac tcaaggacta cttttggttg aagtttataa 180
 tctagatacc tctacttttt gtttttgctg ttcgacagtt cacaaagacc ttcagcaatt 240
 tacagggtaa aatcgttgaa gtagtggagg tgaaactgaa atttaaaatt attctgtaaa 300
 tactataggg aaagaggctg agcttagaat cttttggttg ttcatgtgtt ctgtgctctt 360
 atcatcacac tgctcgactt aca 383

<210> 172
 <211> 699
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature
 <222> 641
 <223> n = A,T,C or G

<400> 172
 tcgggtgatg cctcctcagg cttgtcgtta gtgtacacag agctgctcat gaagcgacag 60
 cggctgcccc tggcacttca gaacctcttc ctctacactt ttggtgcgct tctgaatcta 120
 ggtctgcatg ctggcgggcg ctctggccca ggcctcctgg aaagtttctc aggatgggca 180
 gcactcgtgg tgctgagcca ggcactaaat ggactgctca tgtctgctgt catggagcat 240
 ggcagcagca tcacacgcct ctttgtggtg tcctgctcgc tgggtggtaa cgcctgctc 300
 tcagcagtc tgctacggct gcagctcaca gccgccttct tcctggccac attgctcatt 360
 ggcttgccca tgcgcctgta ctatggcagc cgctagtccc tgacaacttc caccctgatt 420
 ccggaccctg tagattgggc gccaccacca gatccccctc ccaggccttc ctccctctcc 480
 catcagcggc cctgtaacaa gtgccttgtg agaaaagctg gagaagtga ggcagccagg 540
 ttattctctg gaggttgggt gatgaagggg tacccttagg agatgtgaag tgtggggttg 600
 gttaaggaaa tgcttaccat cccccacccc caaccaagtt nttccagact aaagaattaa 660
 ggtaacatca atacctaggc ctgaggaggc atcacccga 699

<210> 173
 <211> 701
 <212> DNA
 <213> Homo sapiens

<400> 173
 tcgggtgatg cctcctcagg ccagatcaaa cttgggggtg aaaactgtgc aaagaaatca 60
 atgtcggaga aagaattttg caaaagaaaa atgcctaata agtactaatt taataggtca 120
 cattagcagt ggaagaagaa atgttgatat tttatgtcag ctattttata atcaccagag 180
 tgcttagctt catgtaagcc atctcgtatt cattagaaat aagaacaatt ttattcgtcg 240
 gaaagaactt ttcaatttat agcatcttaa ttgctcagga ttttaaattt tgataaagaa 300
 agctccactt ttggcaggag tagggggcag ggagagagga ggctccatcc acaaggacag 360
 agacaccagg gccagtaggg tagctggtgg ctggatcagt cacaacggac tgacttatgc 420
 catgagaaga aacaacctcc aaatctcagt tgcttaatac aacacaagct catttcttgc 480
 tcacgttaca tgtcctatgt agatcaacag caggtgactc agggacccag gctccatctc 540
 catatgagct tccatagtca ccaggacacg ggctctgaaa gtgtcctoca tgcagggaca 600
 catgcctctt cctttcattg ggcagagcaa gtcacttatg gccagaagtc acactgcagg 660
 gcagtgccat cctgctgtat gcctgaggag gcatcacccg a 701

<210> 174
 <211> 700
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 19
 <223> n = A,T,C or G

<400> 174
 tcgggtgatg cctcctcang cccctaaatc agagtccagg gtcagagcca caggagacag 60
 ggaaagacat agattttaac cggccccctt caggagattc tgaggctcag ttcactttgt 120
 tgcagtttga acagaggcag caaggctagt ggttaggggc acggtctcta aagctgcact 180
 gcctggatct gcctccagc tctgccagga accagctgcg tggccttgag ctgctgacac 240
 gcagaaagcc ccctgtggac ccagtctcct cgtctgtaag atgaggacag gactctagga 300
 aocctttccc ttggtttggc ctcaactttca caggctccca tcttgaactc tatctactct 360

```
<210> 175
<211> 484
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 30
<223> n = A,T,C or G
```

<400> 175						
tatagggcga	attgggcccg	agttgcatgn	tcccgcccg	catggccgcg	ggattcgggt	60
gatgcctcct	caggcttgtc	tgccacaagc	tacttctctg	agctcagaaa	gtgccccttg	120
atgaggaaaa	atgtcctact	gcactgcgaa	tttctcagtt	ccattttacc	tcccagtcct	180
ccttctaaac	cagttaataa	attcattcca	caagtattta	ctgattacct	gcttgtgcc	240
gggactattc	tcaggctgaa	gaagggtgga	ggggaggggc	gaacctgagg	agccacctga	300
gccagcttta	tatttcaacc	atggctggcc	catctgagag	catctcccca	ctctcgccaa	360
cctatcgggg	catagcccag	ggatgcccc	aggcgccca	ggttagatgc	gtccctttgg	420
cttgtcagtg	atgacataca	ccttagctgc	ttagctgggtg	ctggcctgag	gaggcatcac	480
ccga						484

```
<210> 176
<211> 432
<212> DNA
<213> Homo sapiens
```

```
<400> 176
tcgggtgatg cctcctcagg gctcaaggga tgagaagtga cttctttctg gagggaccgt 60
tcatgccacc caggatgaaa atggataggg acccacttgg aggacttgct gatatgtttg 120
gacaaatgcc aggtagcgga attggtactg gtccaggagt tatccaggat agattttcac 180
ccaccatggg acgtcatcgt tcaaataaac ttttcaatgg ccatggggga cacatcatgc 240
ctccacacac atcgcagttt ggagagatgg gaggcaagtt tatgaaaagc caggggctaa 300
gccagctcta ccataaccag agtcaggga ctttatccca gctgcaagga cagtogaagg 360
atatgccacc tcggttttct aagaaaggac agcttaatgc agatgagatt agcctgagga 420
ggcatcaccc ga                                     432
```

```
<210> 177
<211> 788
<212> DNA
<213> Homo sapiens
```

<400>	177						
tagcatgttg	agcccagaca	cagtagcatt	tgtgccaat	tctggttgga	atggtgacaa	60	
catgctggag	ccaagtgcta	acatgccttg	gttcaaggga	tggaaagtca	cccgtaagga	120	
tggcaatgcc	agtggaaacca	cgtgcttga	ggctctggac	tgcatcctac	caccaactcg	180	
cccaactgac	aagcccttgc	gcctgcctct	ccaggatgtc	tacaaaattg	gtggtattgg	240	
tactgttct	gttggccgag	tggagactgg	tgttctcaaa	cccggatatg	tggtcacctt	300	

```
<210> 178
<211> 786
<212> DNA
<213> Homo sapiens
```

```
<210> 179
<211> 796
<212> DNA
<213> Homo sapiens
```

$\langle 210 \rangle$	180
$\langle 211 \rangle$	488

<212> DNA

<213> Homo sapiens

<400> 180

```

ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt 60
aaaacgacgg ccagtgaatt gtaatacgac tcaactatagg gcgaattggg cccgacgtcg 120
catgctcccc gccgccatgg ccgcgggata gcatgttgag cccagacacc tgcagggtcat 180
ttggagagat ttttcacgtt accagcttga tgggtctttt caggaggaga gacactgagc 240
actcccaagg tgaggttgaa gatttcctct agatagccgg ataagaagac taggagggat 300
gcctagaaaa tgattagcat gcaaatttct acctgccatt tcagaactgt gtgtcagccc 360
acattcagct gcttcttggt aactgaaaag agagagggtat tgagactttt ctgatggccg 420
ctctaacatt gtaacacagt aatctgtgtg tgtgtgggtg tgtgtgtgtg tctgggctca 480
acatgcta

```

<210> 181

<211> 317

<212> DNA

<213> Homo sapiens

<400> 181

```

tagcatgttg agcccagaca cggcgacggt acctgatgag tggggtgatg gcacctgtga 60
aaaggaggaa cgtcatcccc catgatattg gggaccaga tgatgaacca tggctccgcg 120
tcaatgcata tttaatccat gatactgctg attggaagga cctgaacctg aagtttgtgc 180
tgcaggttta tcgggactat tacctcacgg gtgatcaaaa ctctctgaag gacatgtggc 240
ctgtgtgtct agtaagggat gcacatgcag tggccagtggt gccaggggta tggttggtgt 300
ctgggctcaa catgcta

```

<210> 182

<211> 507

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 493

<223> n = A,T,C or G

<400> 182

```

tagcatgttg agcccagaca ctggctgtta gccaaatcct ctctcagctg ctccctgtgg 60
tttggtgact caggattaca gaggcacccct gtttcaggga acaaaaagat tttagctgcc 120
agcagagagc accacataca ttagaatggt aaggactgcc acctccttca agaacaggag 180
tgagggtggt ggtgaatggg aatggaagcc tgcattccct gatgcatttg tgctctctca 240
aatcctgtct tagtcttagg aaaggaagta aagtttcaag gacggttcog aactgctttt 300
tgtgtctggg ctcaacatgc tatcccgagg ccatggcggc cgggagcatg cgacgtcggg 360
cccaattcgc cctatagtga gtcgtattac aattcactgg ccgtcgttt acaacgtcgt 420
gactgggaaa accctggcgt taccacaactt aatcgccctg cagcacatcc ccctttccca 480
gctggcgtaa tancgaaaag gcccgca

```

<210> 183

<211> 227

<212> DNA

<213> Homo sapiens

<400> 183

gatttacgct gcaacactgt ggaggtagcc ctggagcaag gcaggcatgg atgcttctgc 60
aatcccaaaa tggagcctgg tatttcagcc aggaatctga gcagagcccc ctctaattgt 120
agcaatgata agttattctc tttgttcttc aaccttccaa tagccttgag cttccagggg 180
agtgtcgtta atcattacag cctgggtctcc acagtgttgc agcgtaa 227

<210> 184

<211> 225

<212> DNA

<213> Homo sapiens

<400> 184

ttacgctgca aactgtgga gcagattaac atcagaacttt tctatcaaca tgactggggg 60
tactaaaaag acaacaaatc aatggcttca aaagtctaag gaataatttc gatacttcaa 120
ctttataaaa cctgacaaaa ctatcaatca agcataaaga cagatgaaga acatttccag 180
at ttgtggcca atcagatatt ttacctccac agtgttgcag cgtaa 225

<210> 185

<211> 597

<212> DNA

<213> Homo sapiens

<400> 185

ggcccgcagct cgcattgtcc cggccgccat ggccgcggga ttctgttaggg tctctatcca 60
ctgggaccca taggctagtc agagtattta gagttgagtt cctttctgct tcccagaatt 120
tgaaagaaaa ggagtgaggt gatagagctg agagatcaga tttgcctctg aagcctgttc 180
aagatgtatg tgctcagacc ccaccactgg ggcctgtggg tgaggctctg ggcattctatt 240
tgaatgaatt gctgaagggg agcactatgc caagggaagg gaacccatcc tggcactggc 300
acaggggtca ccttatccag tgctcagtgc ttctttgctg ctacctggtt ttctctcata 360
tgtgaggggc aggtgaagaag aagtgccrgr gtgtgtgcga gttttagaac atctaccagt 420
aagtggggaa gtttcacaaa gcagcagctt gtgtttgtgt attttcacct tcagtttagaa 480
gaggaaggct gtgagatgaa tgtagttga gtggaaaaga cgggtaagct tagtggatag 540
agaccctaac gaatcactag tgccgcgcc ttgcaggtcg accatatggg agagctc 597

<210> 186

<211> 597

<212> DNA

<213> Homo sapiens

<400> 186

ggcccgaagt tgcattgttc cggccgccat ggccgcggga ttctgttaggg tctctatcca 60
ctacctaaaa aatcccaaac atataactga actcctcaca cccaattgga ccaatccatc 120
accccagagg cctacagatc ctcccttgat acataagaaa atttcccaa actacctaac 180
tatatcattt tgcaagattt gttttaccaa attttgatgg cctttctgag cttgtcagtg 240
tgaaccacta ttacgaacga tcggatatta actgcccctc accgtccagg tgtagctggc 300
aacatcaagt gcagtaaata ttcattaagt tttcacctac taagggtgctt aaacacccta 360
gggtgccatg tcggtagcag atcttttgat ttgtttttat ttcccataag ggtcctgttc 420
aaggatcaatc atacatgtag tgtgagcagc tagtcactat cgcattgactt ggaggggtgat 480
aatagaggcc tcctttgctg ttaaagaact cttgtcccag cctgtcaaag tggatagaga 540
ccctaacgaa tcactagtgc ggccgcctgc aggtcgacca tatgggagag ctcccaa 597

<210> 187

<211> 324

<212> DNA

<213> Homo sapiens

```
<210> 188
<211> 178
<212> DNA
<213> Homo sapiens
```

```
<400> 188
gcgcgggggat tcggggtgat acctctcat gccaaaatac aacgtntaat ttcacaactt 60
gccttccaat ttacgcattt tcaatttgct ctccccattt gttgagtcac aacaaacacc 120
attgccaga aacatgtatt acctaacatg cacatactct taaaactact catccctt 178
```

<400>	189						
tgacaccttg	tccagcatct	gacacagttct	tggctcttgg	aaaatattgg	ataaatgaaa	60	
atgaattttct	ttagcaagtg	gtataagctg	agaatatacg	tatcacatat	cctcattcta	120	
agacacattc	agtgtccctg	aaattagaat	aggacttaca	ataagtgtgt	tcactttctc	180	
aatagctgtt	attcaattga	tggtaggcct	taaaagtcaa	agaaatgaga	gggcatgtga	240	
aaaaaagctc	aacatcactg	atcattagaa	aacttccatt	caaaccccca	atgagatacc	300	
atctcatacc	agtcagaatg	gctattatta	aaaagtcaaa	aaataacaga	tgctggacaa	360	
ggtgtca						367	

```
<220>
<221> misc_feature
<222> 323
<223> n = A,T,C or G
```

<400>	190						
gacaccttgt	ccagcatctg	acaacgctaa	cagcctgagg	agatctttat	ttattttattt	60	
agttttttact	ctggctaggc	agatggtggc	taaaacattc	atttacccat	ttatttcattt	120	
aattgttctct	gcaaggccta	tggatagagt	attgtcccag	actgctctcg	aagctaggag	180	
catggggatg	aacaagatag	gctacatcct	gttcccacag	aacttccact	ttagctctggg	240	
aaacagatga	tatatacaaa	tatataaatg	aattcaggta	gttttaagta	cgaaaagaat	300	

```
<210> 191
<211> 369
<212> DNA
<213> Homo sapiens
```

```
<210> 192
<211> 449
<212> DNA
<213> Homo sapiens
```

```
<210> 193
<211> 372
<212> DNA
<213> Homo sapiens
```

```
<210> 194
<211> 309
<212> DNA
<213> Homo sapiens
```

```
<220>  
<221> misc_feature  
<222> 140, 205
```

<223> n = A,T,C or G

<400> 194

```

tgacgcttgg ccacttgaca cttatgtaga atccatcgtg ggctgatgca agccctttat 60
ttaggcttag tgttgtgggc accttcaata tcacactaga gacaaacgcc acaagatctg 120
cagaaacatt cagttctgan cactcgaatg gcaggataac tttttgtgtt gtaatccttc 180
acatatataa aaacaaactc tgcantctca cgttacaaaa aaacgtactg ctgtaaaata 240
ttaagaaggg gtaaaggata ccatctataa caaagtaact tacaactagt gtcaagtggc 300
caagcgtca                                     309

```

<210> 195

<211> 312

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 100, 270

<223> n = A,T,C or G

<400> 195

```

tgacgcttgg ccacttgaca cccaatctcg cacttcatcc tcccagcacc tgatgaagta 60
ggactgcaac tatccccact tcccagatga ggggaccaan gtacacatta ggacccggat 120
gggagcacag atttgtccga tcccagactc caagcactca gcgtcactcc aggacagcgg 180
ctttcagata aggtcacaaa catgaatggc tccgacaacc ggagtcagtc cgtgctgagt 240
taaggcaatg gtgacacgga tgcacgtgtn acctgtaatg gttcatcgta agtgtcaagt 300
ggccaagcgt ca                                     312

```

<210> 196

<211> 288

<212> DNA

<213> Homo sapiens

<400> 196

```

tgtatcgacg tagtgggtctc ctcagccatg cagaactgtg actcaattaa acctctttcc 60
tttatgaatt acccaatctc gggtagtgtc tttatagtag tgtgagaatg gactaataca 120
agtacatttt acttagtaat aataataaac aaatatatta catttttgtg tatttactac 180
accatatttt ttattgttat tgtagtgtag accttctact tattaaaaga aataggcccg 240
aggcgggcag atcacgaggt caggagatgg agaccactac gtcgatac          288

```

<210> 197

<211> 289

<212> DNA

<213> Homo sapiens

<400> 197

```

ttgggcacct tcaatatcat gacaggtgat gtgataacca agaaggctac taagtgatta 60
atgggtgggt aatgtatata gagtaggtac actggacaga ggggtaattc atagccaagg 120
caggagaagc agaatggcaa aacatttcat cacactactc aggatagcat gcagttttaa 180
acctataagt agtttatttt tgggaatttc cacttaatat tttcagactg caggtaacta 240
aactgtggaa cacaagaaca tagataaggg gagaccacta cgtcgatac          289

```

<210> 198

<211> 288

<212> DNA

<213> Homo sapiens

<400> 198

```
gtatcgacgt agtgggtctcc caagcagtgg gaagaaaacg tgaaccaatt aaaatgtatc 60
agatacccca aagaaaggcg cttgagtaaa gattccaagt gggtcacaat ctcagatctt 120
aaaattcagg ctgtcaaaga gatttgctat gaggttgctc tcaatgactt caggcacagt 180
cggcaggaga ttgaagccct ggccattgtc aagatgaagg agctttgtgc catgtatggc 240
aagaaagacc ccaatgagcg ggactcctgg agaccactac gtcgatac 288
```

<210> 199

<211> 1027

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 17, 21, 36, 39, 40, 42, 63, 98, 116, 145, 162, 173, 865,
885, 891, 916, 924, 927, 929, 934, 942, 949, 976, 983, 988,
989, 1009, 1014

<223> n = A,T,C or G

<400> 199

```
gctttttggg aaaaacncaa ntgggggaaa gggggnttnn tngcaagggg ataaaggggg 60
aancccaggg tttccccatt caggagagtg taaaaagncg gccaggggat tgtaanagga 120
ttcaataata gggggaatgg gcccnagaat tgcaaggctc cngcccgcga tgnccgcggg 180
atttagtgac attacgacgs tggtataaaa gtgggsccaa waaatatttg tgatgtgatt 240
tttsgaccag tgaaccatt gwacaggacc tcatctccty tgagatgrta gccataatca 300
gataaaagrt tagaagtytt tctgcacgtt aacagcatca ttaaattggag tggcatcacc 360
aatctcacc tttgttagcc gataccttcc ccttgaagge attcaattaa gtgaccaatc 420
gtcatacgag aggggatggc atggggattg atgatgatat caggggtgat accttcacag 480
gtgaaaaggca tatcctcttg tctatactga ataccacaag tacccttttg accatgtcga 540
ctagcaaat tgtctccaat ctgtgtwac cctaacagag cgtaccctta tttacaaaa 600
tttatatcct tctgattga gagttaccat aacctgatcc acaatgcccg tctcgctwgt 660
tctgagaaaa gtgctacagt ctctcttggt atagcgtcta ttggtgctc ccaattcatc 720
ttcatttttc aggcaagggt aactgttttg cctataataa cmtcatctcc tgatacmcga 780
aaccckkga rctatcaaac catcatcatc cagcgttckt watgtymcta aatccctatt 840
gcggccgcct gcagggtcaac atatnggaaa acccccacc ccttnggagc ntaccttgaa 900
ttttccatat gtccntaaa ttanctngnc ttanctggc cntaacctnt tccggtttaa 960
attgtttccg ccccnttcc cnccttnna accggaaacc ttaattttna accnggggtt 1020
cctatcc 1027
```

<210> 200

<211> 207

<212> DNA

<213> Homo sapiens

<400> 200

```
agtacatta cgacgctggc catcttgaat cctagggcat gaagttgcc caaagttcag 60
cacttggta agcctgatcc ctctggttta tcacaaagaa taggatggga taaagaaagt 120
ggacacttaa ataagctata aattatatgg tcttgtcta gcaggagaca actgcacagg 180
tatactacca gcgtcgtaat gtcacta 207
```

<210> 201

<210> 205
<211> 505

<212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 447
 <223> n = A,T,C or G

<400> 205
 tacgctgcaa cactgtggag ccattcatac aggtccctaa ttaaggaaca agtgattatg 60
 ctacctttgc acgggttaggg tacgcgggcc gttaaacaatg tgtcactggg caggcgggtgc 120
 ctctaatact ggtgatgcta gaggtgatgt ttttggtaaa caggcggggg aagatttgcc 180
 gaggtccttt tacttttttt aacctttcct tatgagcatg cctgtgttgg gttgacagtg 240
 ggggtaataa tgacttggtg gttgattgta gatattgggc tgtaattgt cagttcagtg 300
 ttttaactctg acgcaggcct atgcggagga gaatgttttc atgttactta tactaacatt 360
 agttcttcta tagggtgata gattgggtcca attgggtgtg aggagttcag ttatatgttt 420
 gggatttttt aggtagtggg tgttgancct gaacgccttc ttaattgggt gctgctttta 480
 rgctactat gggtggtaaa tggct 505

<210> 206
 <211> 179
 <212> DNA
 <213> Homo sapiens

<400> 206
 tagactgact catgtcccct accaaagccc atgtaaggag ctgagttcct aaagactgaa 60
 gacagactat tctctggaga aaaataaaat ggaaattgta ctttaaaaaa aaaaaaaatc 120
 ggccgggcat ggtagcacac acctgtaatc ccagctacta ggggacatga gtcagtcta 179

<210> 207
 <211> 176
 <212> DNA
 <213> Homo sapiens

<400> 207
 agactgactc atgtccccta cccacacctt tgcgtgtgctg ccgtgttcct aacaggtcac 60
 agactggtag tggtcagtgg cctggggggtt ggggacctct attatatggg atacaaattt 120
 aggagttgga attgacacga tttagtgaact gatgggatat ggggtggtaaa tggcta 176

<210> 208
 <211> 196
 <212> DNA
 <213> Homo sapiens

<400> 208
 agactgactc atgtccccta tttaacaggg tctctagtgc tgtgaaaaaa aaaaatgctg 60
 aacattgcat ataacttata ttgtaagaaa tactgtacaa tgactttatt gcactctgggt 120
 agctgtaagg catgaaggat gccaaagaagt ttaaggaata tgggtggtaa atggctaggg 180
 gacatgagtc agtcta 196

<210> 209
 <211> 345
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature

<222> 53, 56

<223> n = A,T,C or G

<400> 209

```
gacgcttggc cacttgacac cttttatattt ttaaggattc ttaagtcatt tangtnactt 60
tgtaagtttt tcctgtgccc ccataagaat gatagcttta aaaattatgc tggggtagca 120
aagaagatac ttctagcttt agaatgtgta ggtatagcca ggattcttgt gaggaggggt 180
gatttagagc aaattttctta ttctccttgc ctcatctgta acatggggat aataatagaa 240
ctggccttgac aaggttgga ttagtattac atggtaaata catgtaaaat gtttagaatg 300
gtgccaagta tctaggaagt acttgggcac ggggtggttaa tggct 345
```

<210> 210

<211> 178

<212> DNA

<213> Homo sapiens

<400> 210

```
gacgcttggc cacttgacac tagagtaggg tttggccaac tttttctata aaggaccaga 60
gagtaaatat ttcaggcttt gtgggttgtg cagtctctct tgcaactact cagctctgcc 120
attgtagcat agaaatcagc catagacagg acagaaatga atgggtggta aatggcta 178
```

<210> 211

<211> 454

<212> DNA

<213> Homo sapiens

<400> 211

```
tgggcacctt caatatctat ccagcgcac taaattcgct tttttcttga ttaaaaattt 60
caccacttgc tgtttttgct catgtatacc aagtagcagt ggtgtgaggc catgcttggt 120
ttttgattcg atatcagcac cgtataagag cagtgccttg gccattaatt tatcttcatt 180
gtagacagca tagtgtagag tggatatctc atactcatct ggaatatttg gatcagtgc 240
atgttcacgc aacattaacg cacattcatc ttcttggcat tgtacggcct ttgtcagagc 300
tgtcctcttt ttgttgtoaa ggacattaag ttgacatcgt ctgtccagca cgagttttac 360
tacttctgaa ttcccattgg cagaggccag atgtagagca gtcctctttt gcttgtccct 420
cttgttcaca tcagtgtccc tgagcataac ggaa 454
```

<210> 212

<211> 337

<212> DNA

<213> Homo sapiens

<400> 212

```
tccgttatgc caccagaaa acctactgga gttacttatt aacatcaagg ctggaaccta 60
tttgccctcag tcctatctga ttcattgagca catgggttatt actgatcgca ttgaaaacat 120
tgatcacctg ggtttcttta tttatcgact gtgtcatgac aaggaaactt acaaactgca 180
acgcagagaa actattaaag gtattcagaa acgtgaagcc agcaattgtt tcgcaattcg 240
gcattttgaa aacaaatttg ccgtggaaac ttttaatttgt tcttgaacag tcaagaaaaa 300
cattattgag gaaaaattaat atcacagcat aacggaa 337
```

<210> 213

<211> 715

<213> Homo sapiens

<221> misc feature

<222> 552, 630, 649, 657, 691, 693, 697

$\langle 223 \rangle$ n = A, T, C or G

tccgggtgatg	cctcctcagg	catcttccat	ccatctcttc	aagattagct	gtcccaaatg	60
tttttccttc	tcttctttac	tgataaattt	ggactccttc	ttgacactga	tgacagcttt	120
agtatccttc	ttgtcacctt	gcagacttta	aacataaaaa	tactcattgg	ttttaaaagg	180
aaaaaagtat	acattagcac	tattaagctt	ggccttgaaa	cattttctat	cttttattaa	240
atgtcggtta	gctgaacaga	attcatttta	caatgcagag	tgagaaaaga	agggagctat	300
atgcatttga	gaatgcaagc	attgtcaaat	aaacatttta	aatgctttct	taaagtgagc	360
acatacagaa	atacattaag	atattagaaa	gtgtttttgc	ttgtgtacta	ctaattaggg	420
aagcaccttg	tatagttcct	cttctaaaaa	tgaagtagat	tttaaaaacc	catgtaattt	480
aattgagctc	tcagtttcga	ttttaggaga	atttttaacag	ggattttggtt	ttgtctaaat	540
tttgtcaatt	tnntttagtta	atctgtataa	ttttataaat	gtcaaacctgt	atttagtccg	600
ttttcatgct	gctatgaaag	aaatacccan	gcagagggta	tttataaang	gaaagangtt	660
aatttgactc	ccaqttcaca	ggcctgagga	ngnatcnccc	gaaatcctta	ttgcg	715

<211> 345

<212> DNA

<213> Homo sapiens

<221> misc feature

 $\langle 222 \rangle$ 6, 8, 15

$\langle 223 \rangle$ n = A, T, C or G

ggtaangngc	atacntcggt	gctccggccg	ccggagtcgg	gggattcggg	tgatgcctcc	60
tcaggcccac	ttgggcctgc	ttttccaaa	tggcagctcc	tctggacatg	ccattccttc	120
tcccacctgc	ctgattcttc	atatgttggg	tgtccctggt	tttctggtgc	tatttcctga	180
ctgctgttca	gctgccactg	tcttgcaaa	cctgcctttt	taaatgcctc	accattcctt	240
catttgtttc	ttaaataatg	gaagtgaag	tgccacttga	ggccgggcac	agtggctcac	300
gcctgtaatc	ccagcacttt	qqaqacttga	qgaqgcattca	cccgga		345

<211> 429

<212> DNA

<213> Homo sapiens

ggtgatgcct	cctcaggcga	agctcaggga	ggacagaaac	ctcccgtgga	gcagaagggc	60
aaaagctcgc	ttgatcttga	ttttcagtac	gaatacagac	cgtgaaagcg	gggcctcacg	120
atcctttctga	ccttttgggt	tttaagcagg	aggtgtcaga	aaagttacca	cagggtataac	180
tggcttgtgg	cggccaagcg	ttcatagcga	cgtcgctttt	tgatccttcg	atgtcggttc	240
ttcctatcat	tgtgaagcag	aattcaccaa	gcgttggtt	gttcaccac	taatagggaa	300
cgtgagctgg	gtttagaccg	tcgtgagaca	ggttagtttt	acctactga	tgatgtgtkg	360
ttgccatggt	aatcctgctc	agtacgagag	gaaccgcagg	ttcasacatt	tggtgtatgt	420
gcttgccctt						429

<210> 216
 <211> 593
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 15, 429, 446, 498, 512, 538, 543, 557
 <223> n = A,T,C or G

<400> 216
 tgacacctat gtcnngcatc tgttcacagt ttccacaaat agccagcctt tggccacctc 60
 tctgtcctga ggtatacaag tatatcagga ggtgtatacc ttctcttctc ttccccacca 120
 aagagaacat gcaggctctg gaagctgtct taggagcctt tgggctcaga atttcagagt 180
 cttgggtacc ttggatgtgg tctggaagga gaaacattgg ctctggataa ggagtacagc 240
 cggaggaggg tcacagagcc ctcagctcaa gcccctgtgc cttagtctaa aagcagcttt 300
 ggatgaggaa gcagggttaag taacatacgt aagcgtacac aggtagaaaag tgctgggagt 360
 cagaattgca cagtgtgtag gagtagtacc tcaatcaatg agggcaaadc aactgaaaga 420
 agaagaccna ttaatgaatt gcttangggg aaggatcaag gctatcatgg agatctttct 480
 aggaagatta ttgtttanaa ttatgaaagg antagggcag ggacagggcc agaagtanaa 540
 ganaacattg cctatanccc ttgtcttgca cccagatgct ggacaagggtg tca 593

<210> 217
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 217
 tgacaccttg tccagcatct gacgtgaaga tgagcagctc agaggaggtg tcttggtatt 60
 cctggttctg tgggtccgt ggcaatgaat tcttctgtga agtggatgaa gactacatcc 120
 aggacaaatt taatcttact ggactcaatg agcaggtccc tcactatcga caagctctag 180
 acatgatctt ggacctggag cctgatgaag aactggaaga caaccccaac cagagtgacc 240
 tgattgagca ggacgcccag atgctttatg gattgatcca cgcgccgtac atccttacca 300
 accgtggcat cgcccagatg ctggacaagg tgtca 335

<210> 218
 <211> 248
 <212> DNA
 <213> Homo sapiens

<400> 218
 tacgtactgg tcttgaaggt cttaggtaga gaaaaaatgt gaatatttaa tcaaagacta 60
 tgtatgaaat gggactgtaa gtacagaggg aagggaggcc cttatcgcca gaagttggta 120
 gatgcgtccc cgtcatgaaa tgttgtgtca ctgcccagaca tttgccgaat tactgaaatt 180
 ccgtagaatt agtgcaaatt ctaacgttgt tcatctaaga ttatggttcc atgtttctag 240
 tactttta 248

<210> 219
 <211> 530
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature

<222> 49, 216, 265, 275, 281, 296, 371, 407, 424, 429, 454, 456,
458, 464, 474, 476, 506, 509, 527, 530

<223> n = A,T,C or G

<400> 219

```

tgacgcttgg ccacttgaca caagtagggg ataaggacaa agacccatna ggtggcctgt 60
cagccttttg ttactgttgc ttccctgtca ccacggcccc ctctgtaggg gtgtgctgtg 120
ctctgtggac attggtgcat ttccacacat accatttctt ttctgcttca cagcagtcct 180
gaggcgggag cacacaggac taccttgtca gatgangata atgatgtctg gccaaactcac 240
cccccaacct tctcactagt tatangaaga gccangccta naaccttcta tctgncccc 300
ttgccctatg acctcatccc tgttccatgc cctatttctga tttctgggtga actttggagc 360
agcctggttt ntccctcctca ctccagcctc tctccatacc atggtanggg ggtgctgttc 420
cacncaaaang gtcagggtgtg tctggggaat cctnananct gccnggagtt tccnangcat 480
tcttaaaaaac cttcttgctt aatcanatng tgtccagtgg ccaacntcn 530

```

<210> 220

<211> 531

<212> DNA

<213> Homo sapiens

<400> 220

```

tgacgcttgg ccacttgaca ctaaatagca tcttctaaag gcctgattca gagttgtgga 60
aaattctccc agtgtcaggg attgtcagga acagggctgc tctgtgctc actttacctg 120
ctgtgtttct gctggaaaag gaggggaagag gaatggctga tttttacctt atgtctccca 180
gtttttcata ttcttcttgg atcctcttct ctgacaactg ttcccttttg gtcttcttct 240
tcttgctcag agagcaggtc tctttaaaac tgagaaggga gaatgagcaa atgattaaag 300
aaaacacact tctgaggccc agagatcaaa tattaggtaa atactaaacc gcttgccctgc 360
tgtggtcact tttctcctct ttccatgct ctatccctct atccccacc tattcatatg 420
gcttttatct gccaaagtat ccggcctctc atcaaccttc tcccctagcc tactggggga 480
tatccatctg ggtctgtctc tgggtgtatt gtgtcaagtg gccaaagctc a 531

```

<210> 221

<211> 530

<212> DNA

<213> Homo sapiens

<400> 221

```

attgacgctt ggccacttga caccgcctg cctgcaatac tggggcaagg gccttcaactg 60
ctttcctgcc accagctgcc actgcacaca gagatcagaa atgctaccaa ccaagactgt 120
tggtcctcag cctctctgag gagaaagagc agaagcctgg aagtcagaag agaagctaga 180
tcggctacgg ccttggcagc cagcttcccc acctgtggca ataaagtcgt gcatggctta 240
acaatggggg cacctcctga gaaacacatt gtaggcaat tcggcgtgtg ttcacagag 300
catatttaca caaacctcga tagtgacagc tactatccac tattgctcct acgctgcaaa 360
cctgaacagc atgggactgt actgaatact ggaagcagct ggtgatggta cttattttgtg 420
tatctaaaca cagagaaggt acagtaagaa tatggtatca taaacttaca gggaccgcca 480
tcctatatgc agtctgttgt gacaaaaatg tgtcaagtgg ccaagcgtca 530

```

<210> 222

<211> 578

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature
 <222> 308, 381, 561, 570, 573
 <223> n = A,T,C or G

<400> 222
 tgtatcgacg tagtgggtctc cgggctacta ggccgttggtg tgctggtagt acctgggtca 60
 ctgaaaggcg catctccctc cccgcgtcgc cctgaagcag ggggaggact tcgcccagcc 120
 aaggcagttg tatgagtttt agctgcggca cttcgagacc tctgagccca cctccttcag 180
 gagccttccc cgattaagga agccagggtg aggattcctt cctccccag acaccacgaa 240
 caaaccacca cccccctat tctggcagcc catatacatc agaacgaaac aaaaataaca 300
 aataaaacnaa aaccaaaaaa aaaagagaag gggaaatgta tatgtctgtc catcctgttg 360
 ctttagcctg tcagctccta nagggcaggg accgtgtcct ccgaatggtc tgtgcagcgc 420
 cgactgcggg aagtatcgga ggaggaagca gagtgcagcag aagttgaacg gtgggcccgg 480
 cggctcttgg gggctggtgt tgtacttcga gaccgcttcc gctttttgtc ttagatttac 540
 gtttgctctt tggagtggga naccactacn tcnatata 578

<210> 223
 <211> 578
 <212> DNA
 <213> Homo sapiens

<400> 223
 tgtatcgacg tagtgggtctc ctcttgcaaa ggactggctg gtgaatgggtt tccctgaatt 60
 atggacttac cctaaacata tcttatcatc attaccagtt gcaaaatatt agaatgtgtt 120
 gtcactgttt catttgattc ctagaagggt agtcttagat atgttacttt aacctgtatg 180
 ctgtagtgct ttgaatgcat tttttgtttg catttttgtt tgcccaacct gtcaattata 240
 gctgcttagg tctggactgt cctggataaa gctgttaaaa tattcaccag tccagccatc 300
 ttacaagcta attaatgcaa ctaaatgctt ccttggtttg ccagacttgt tatgtcaatc 360
 ctcaatttct gggttcattt tgggtgccct aaatcttagg gtgtgacttt cttagcatcc 420
 tgtaacatcc attcccaagc aagcacaact tcacataata ctttccagaa gttcattgct 480
 gaagccttcc cttcaccagg cggagcaact tgattttcta caacttccct catcagagcc 540
 acaagagtat gggatatgga gaccactacg tcgataca 578

<210> 224
 <211> 345
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 13
 <223> n = A,T,C or G

<400> 224
 tgtatcgacg tantgggtctc ccaagggtgct gggattgcag gcatgagcca ccactcccag 60
 gtggatcttt ttctttatata ttacttcatt aggtttctgt tattcaagaa gtgtagtggt 120
 aaaagtcttt tcaatctaca tggttaaata atgatagcct gggaaataaa tagaaatttt 180
 ttctttcatc tttaggttga ataaagaaac agaaaaaata gaacatactg aaaataatct 240
 aagttccaac catagaagaa ctgcagaaga aatgaagaaa gtgatgatga tttagatttt 300
 gatattgatt tagaagacac aggaggagac cactacgtcg ataca 345

<210> 225
 <211> 347
 <212> DNA

<213> Homo sapiens

<400> 225

```
tgtatcgacg tagtggtctc caaactgagg tatgtgtgcc actagcacac aaagccttcc 60
aacagggacg caggcacagg cagtttaaaag ggaatctgtt tctaaattaa tttccacctt 120
ctctaagtat tctttcctaa aactgatcaa ggtgtgaagc ctgtgctctt tcccaactcc 180
cctttgacaa cagccttcaa ctaacacaag aaaaggcatg tctgacactc ttcctgagtc 240
tgactctgat acgttggttct gatgtctaaa gagctccaga acaccaaagg gacaattcag 300
aatgctggtg tataacagac tccaatggag accactacgt cgataca 347
```

<210> 226

<211> 281

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 4, 6, 11

<223> n = A,T,C or G

<400> 226

```
aggngnggga ntgtatcgac gtagtggtct cccaacagtc tgtcattcag tctgcaggtg 60
tcagtgtttt ggacaatgag gcaccattgt cacttattga ctctcagct ctaaagtctg 120
aaattaaatc ttgtcatgac aagtctggaa ttcttgatga ggtttttacaa agtatttttg 180
atcaatactc caacaaatca gaaagccaga aagaggatcc tttcaatatt gcagaaccac 240
gagtggattt acacacctca ggagaccact acgtcgatac a 281
```

<210> 227

<211> 3646

<212> DNA

<213> Homo sapiens

<400> 227

```
gggaaacatc tcctcccagc cttgtaaggg ttggagccct ctccagtata tgctgcagaa 60
ttttctctc gggtttctcag aggattatgg agtcgcgctt aaaaaaggca agctctggac 120
actctgcaaa gtagaatggc caaagtttgg agttgagtg ccccttgaag ggtcactgaa 180
cctcacaatt gttcaagctg tgtggcggtt tgttactgaa actcccgcc tccctgatca 240
gtttccctac attgatcaat ggctgagttt ggtcaggagc accccttcg tggctccact 300
catgcaccat tcataatttt acctccaagg tcctcctgag ccagaccgtg ttttcgcctc 360
gaccctcagc cggttcggct cgcctgtac tgctctctc tgaagaagag gagagtctcc 420
ctcaccagc cccaccgcct taaaaccagc ctactccctt agggtcaccc catgtctcct 480
cggctatgtc cctgttaggc tcatcacca ttgcctcttg gttgcaaccg tgggtgggagg 540
aagtagcccc tctactacca ctgagagagg cacaagtccc tctgggtgat gagtgtctca 600
ccccctcct gggttatgtc ccttctttct acttctgact tgtataattg gaaaacccat 660
aatcctccct tctctgaaaa gccccaggct ttgacctcac tgatggagtc tgtactctgg 720
acacattggc ccacctggga tgactgtcaa cagctccttt tgacctttt cacctctgaa 780
gagagggaaa gtatccaaa agaggccaaa aagtacaacc tcacatcaac caataggccg 840
gaggaggaag ctgaggaat agtgattaga gaccgaattg ggacctaatt gggacccaaa 900
tttctcaagt ggaggagaa cttttgacga tttccaccgg tatctctctg tgggtattca 960
gggagctgct cagaaacctt taaacttgct taaggcgact gaagtcgtcc aggggcatga 1020
tgagtcacca ggagtgtttt tagagcacct ccaggaggct tatcagattt acaccctttt 1080
tgacctggca gcccccga aaatagctgc tcttaatttg gcatttgggt ctcaggcagc 1140
cccagatagt aaaagggaac tccaaaaact agagggtatt tgctggaatg aataccagtc 1200
agctttttaga gatagcctaa aagggtttttg acagtcaaga gggtgaaaaa caaaaacaag 1260
```

```

cagctcaggc agctgaaaaa agccactgat aaagcatcct ggagtatcag agtttactgt 1320
tagatcagcc tcatttgact tccccctcca catgggtgttt aaatccagct acactacttc 1380
ctgactcaaa ctccactatt cctgttcatg actgtcagga actgttggaa actactgaaa 1440
ctggccgacc tgatcttcaa aatgtgcccc taggaaaggt ggatgccacc atgttcacag 1500
acagtagcag cttcctcgag aagggaactac gaaaggccgg tgcagctgtt accatggaga 1560
cagatgtgtt gtgggctcag gctttaccag caaacacctc agcacaaaag gctgaattga 1620
tcgccctcac tcaggctctc cgatggggta aggatattaa cgtaacact gacagcaggt 1680
acgcctttgc tactgtgcat gtacgtggag ccatctacca ggagcgtggg ctactcacct 1740
cagcaggtgg ctgtaatcca ctgtaaagga catcaaaagg aaaacacggc tgttgcccgt 1800
ggtaaccaga aagctgattc agcagctcaa gatgcagtg gactttcagt cacgcctcta 1860
aacttgctgc ccacagtctc ctttccacag ccagatctgc ctgacaatcc cgcatactca 1920
acagaagaag aaaactggcc tcagaactca gagccaataa aaatcaggaa ggttggtgga 1980
ttcttctga ctctagaatc ttcatacccc gaactcttgg gaaaacttta atcagtcacc 2040
tacagtctac caccatttta ggaggagcaa agctacctca gctcctccgg agccgtttta 2100
agatcccca tcttcaaagc ctaacagatc aagcagctct ccggtgcaca acctgcgcc 2160
aggtaaagtc caaaaaaggt cctaaaccca gccaggcca ccgtctcaa gaaaactcac 2220
caggagaaaa gtgggaaatt gactttacag aagtaaaacc acaccgggct gggtaaaaat 2280
accttctagt actggtagac accttctctg gatggactga agcatttgct accaaaaacg 2340
aaactgtcaa tatggtagt aagtttttac tcaatgaaat catccctcga catgggctgc 2400
ctgtttgcc taagggtctga taatggaccg gccttcgcct tgtctatagt ttagtcagtc 2460
agtaaggcgt taaacattca atggaagctc cattgtgcct atcgaccca gagctctggg 2520
caagtagaac gcatgaactg caccctaaaa aacactctta caaaattaat cttagaaacc 2580
gggtgtaaatt gtgtaagtct ccttccttta gccctactta gagtaagggt cacccttac 2640
tggtgctgggt tcttaccttt tgaaatcatg tatgggaggg tgctgcctat cttgcctaag 2700
ctaagagatg cccaattggc aaaaatatca caaactaatt tattacagta cctacagtct 2760
ccccaacagg tacaagatat catcctgcc cttgttcgag gaacccatcc caatccaatt 2820
cctgaacaga cagggccctg ccattcatte ccgccagggt acctgttggt tgttaaaaag 2880
ttccagagag aaggactccc tcctgcttgg aagagacctc acaccgtcat cacgatgcc 2940
acggctctga aggtggatgg cattcctgog tggattcatc actcccgcac caaaaaggcc 3000
aacagagccc aactagaaac atgggtcccc agggctgggt caggcccctt aaaactgcac 3060
ctaagttggg tgaagccatt agattaattc ttttctttaa ttttgtaaaa caatgcatag 3120
cttctgtcaa acttatgtat cttgaagctc aatataaccc ccttggtata actgaggaat 3180
caatgatttg attcccccaa aaacacaagt ggggaatgta gtgtccaacc tgggttttac 3240
taacctgtt tttagactct ccctttcctt taatcactca gcttgtttcc acctgaattg 3300
actctccctt agctaagagc gccagatgga ctccatctt gctctttcac tggcagccgc 3360
ttcctcaagg acttaacttg tgcaagctga ctcccagcac atccaagaat gcaattaact 3420
gataagatac tgtggcaagc tatatccgca gttcccagga attcgtccaa ttgatcacag 3480
ccctctacc cttcagcaac caccacctg atcagtcagc agccatcagc accgaggcaa 3540
ggccctccac cagcaaaaag attctgactc actgaagact tggatgatca ttagtatttt 3600
tagcagtaaa gttttttttt ctttttcttt ctttttttct cgtgcc 3646

```

<210> 228

<211> 419

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 402

<223> n = A,T,C or G

<400> 228

```

taagagggtg caagatctaa gcacagccgt caatgcagaa cacagaacgt agcctggtaa 60
gtgtgttaag agtggaatt tttggagtac agagtaaggc acctaaccct agctgggggt 120

```

```

tggtgacggt cccagatggc ttacagaaga aagtgtcctg agatgagttt ttaagaatga 180
ataaggatag acacaagtga ggactgactt ggcagtgggt aatgggtgggt ggcaaaaaac 240
ttcgcatgta tggaaactgc acgtacagga atgaagaatg agactgtgtg gtgtttaatg 300
agctgcaaat actaatttta tcctgaaagt tttgaagagt taactaaaaa gtatttttta 360
gtaaggaaat aaccctacat ttcagggtta ttgtttgttt anatattgaa ggtgcccaa 419

```

<210> 229

<211> 148

<212> DNA

<213> Homo sapiens

<400> 229

```

aagagggtac ctgtatgtag ccatgggtggc aatgagagac tgattactac ctgctggaga 60
ttgtttaagt gagttaatat attaaggata aaggaggcca ggttttttga ctgttggaga 120
aggaaattac agatattgaa ggtcccaa 148

```

<210> 230

<211> 257

<212> DNA

<213> Homo sapiens

<400> 230

```

taagagggtga cmaaaaaaaaa aaaatagaac gaatgagtaa gacctactat ttgatagtac 60
aacagggtga ctatagtcaa tgataactta attatacatt taacatagag tgtaattgga 120
ttgtttgtaa ctcgaaggat aaatgcttga gaggatggat accccattct ccatgatgta 180
cttatttcac attacatgcc tgtatcaaag catctcatat accctataaa tatgtacacc 240
tactatgtac cctctta 257

```

<210> 231

<211> 260

<212> DNA

<213> Homo sapiens

<400> 231

```

taagagggtga cgggtatttg ctgatgggat ttttttttct ttctttttct ttggaaaaca 60
aaatgaaagc cagaacaaaa ttattgaaca aaagacaggg actaaatctg gagaaatgaa 120
gtcccctcac ctgactgcca ttcatctcta tctgaccttc cagtctaggt taggagaata 180
gggggtggag gggattaatc tgatacaggt atatttaaag caactctgca tgtgtgccag 240
aagtccatgg taccctctta 260

```

<210> 232

<211> 596

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 437, 440, 461, 536, 541, 565, 580, 587, 590, 595

<223> n = A,T,C or G

<400> 232

```

tgctcctctt gccttaccaa ccacaaatta gaaccataat gagatgtcac ctcatacctg 60
gtgggattaa cattatttaa aaaatcagaa gtattgacaa ggatgtgaag aaattagaac 120
atctgtgcac tgttgggtgg aatgtaaaaa aggtgtggcc actatgggta acagcatgaa 180

```

```

ggttcctcaa aaaaaatttt ttttaaatcta ctctatgata gatcttgagg ttgtttatgc 240
aaaagaactg aaatcaggat tttgaggaaa tattcacatt cccacatcca tttctgcttt 300
attcataata ctcaagagat ggaaacaacc taaatgtcca tcccgggatg aatggataaa 360
cacagtgtgg tatatgcata caatggaata ttatttagtc tttaaaaaga aaaattctat 420
catatactac aacttanatn aaccttgagg acacaatgct nagtgaaata agccacggaa 480
ggacgaatac tgcattattc ccttatatga agtatctaaa gtgggtcaaac tcttanagca 540
naaagtaaaa atgggtggtt gccanacagt tgggttaggcn agaaganaan cctant 596

```

<210> 233

<211> 96

<212> DNA

<213> Homo sapiens

<400> 233

```

tcttctgaag acctttcgcg actcttaagc tcgtggttgg taaggcaaga ggagcgttgg 60
taaggcaaga ggagcgttgg taaggcaaga ggagca 96

```

<210> 234

<211> 313

<212> DNA

<213> Homo sapiens

<400> 234

```

tgtaagtcga gcagtgtgat gataaaactt gaatggatca atagttgctt cttatggatg 60
agcaaagaaa gtagtttctt gtgatggaat ctgctcctgg caaaaatgct gtgaacgttg 120
ttgaaaagac aacaaagagt ttagagtagt acataaattt agaatagtac ataaacttag 180
aatagtagat aaacttagta cataaataat gcacgaagca ggggcagggc ttgagagaat 240
tgacttcaat ttggaagag tatctactgt aggttagatg ctctcaaaca gcatcacact 300
gctcgactta caa 313

```

<210> 235

<211> 550

<212> DNA

<213> Homo sapiens

<400> 235

```

aacgaggaca gatccttaaa aagaatgttg agtgaaaaaa gtagaaaata agataatctc 60
caaagtccag tagcattatt taaacatttt taaaaaatac actgataaaa attttgtaca 120
tttcccaaaa atacatatgg aagcacagca gcatgaatgc ctatgggrtt gaggataggg 180
gttgggagta gggatgggga taaaggggga aaataaaacc agagaggagt cttacacatt 240
tcatgaacca aggagtataa ttatttcaac tattttgtacc wgaagtccag aaagagtggg 300
ggcagaaggg ggagaagagg gcgaagaaac gtttttgga gaggggtccc asaagagaga 360
ttttcgcgat gtggcgctac atacgttttt ccaggatgcc ttaagctctg caccctattt 420
ttctcatcac taatattaga ttaaaccctt tgaagacagc gtctgtggtt tctctacttc 480
agctttccct ccgtgtcttg cacacagtag ctgttttaca agggttgaac tgactgaagt 540
gagattattc 550

```

<210> 236

<211> 325

<212> DNA

<213> Homo sapiens

<400> 236

```

tagactgact catgtcccct accagagtag ctagaattaa tagcacaagc ctctacaccc 60

```

```

aggaactcac tattgaatac ataaatggaa tttattcagc cttaaaaagt ttggaaggaa 120
attctgacat atgctaaaac atggatgaac cttgaagact ttatgataag taaaagaagc 180
cagtcataaa aggaaaaata ttgcatgatt ccacttatat gaggtaccta gagtagtcaa 240
tttcatagaa acacaaaata gaatggtggt tgccagggtc tttgaggaaa agggaatgac 300
aagttagggg acatgagtca gtcta 325

```

```

<210> 237
<211> 373
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 355
<223> n = A,T,C or G

```

```

<400> 237
tagactgact catgtcccct atctactcaa catttcact tgaagtctga taggcatctc 60
agacttatct tgtccaaaag caaactcttt atttcttttc atcctagtct ttatttcttg 120
tgctgtctta cccatctcaa aagagtgcc aatccaacca agttgctgaa acagaaatct 180
aagaaatct cttgattctt ctttttccca tctacttcac ttctaattca ttagtaaata 240
atctgtttca gaaaaccaa cacctcatgt tctactcat aagggggagt tgaacaatga 300
gaacacacag acacagggag gggaacatca cacaccacgg cccgtcaggg agtangggac 360
atgagtcagt cta 373

```

```

<210> 238
<211> 492
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 272, 310, 380, 435, 474, 484, 488
<223> n = A,T,C or G

```

```

<400> 238
tagactgact catgtcccct ataatgctcc caggcatcag aaagcatctc aaactggagc 60
tgacaccatg gcagagggtt caggtaagtc acaaaagggg tcctaaagaa tttgccctca 120
atatcagagt gattagaaga agtggacaga gctacccaag tttaacatat gcgagataaa 180
aaaaatatgg cacttgtgaa cacacactac aggaggaaaa taaggaacat aatagcatat 240
tgtgtctatta tgatgatgaa gaacctctct anaagaaac ataaccaag aaacaaagaa 300
aattcctgcn aatgtttaat gctatagaag aaattaacaa aaacatatat tcaatgaatt 360
cagaaaagtt agcagggtcan aagaaaacaa atcaaagacc agaataatcc cattttagat 420
tgtcgagtaa actanaacag aaagaatacc actggaaatt gaattcctac gtangggaca 480
tgantcantc ta 492

```

```

<210> 239
<211> 482
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 245

```

<223> n = A,T,C or G

<400> 239

```

tggaaagtat ttaatgatgg gcaacttgct gtttacttcc tacatatccc atcatcttct 60
gtattttttt aaataacttt tttttggatt ttttaaagtaa ctttattctg agaggtaaca 120
tggattacat acttctaagc cattaggaga ctctatgtta aacccaaaagg aaatgttact 180
agatcttcat ttgatcaata ggatgtgata atcatcatct ttctgctcta atggaaaagt 240
actanaaaca tggaaaccata atcttagatg aacaacgtta gaatttgac taattctacg 300
gaatttcagt aattcggcaa atgtcgggca gtgacacaac atttcatgac ggggacgcat 360
ctaccaactt ctggcgataa gggccaccct tccctctgta cttacagtcc catttcatac 420
acagtctttg attaaatatt cacatTTTTT ctctacctaa agaccttcaa gaccagtacg 480
ta 482

```

<210> 240

<211> 519

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 491

<223> n = A,T,C or G

<400> 240

```

tgtatcgacg tagtggcttc cccatgtgat agtctgaaat atagcctcat gggatgagag 60
gctgtgcccc agcccgacac ccgtaaaggg tctgtgctga ggtggattag taaaagagga 120
aagccttgca gttgagatag aggaagggca ctgtctcctg cctgcccctg ggaactgaat 180
gtctcggtat aaaacccgat tgtacatttg ttcaattctg agataggaga aaaaccaccc 240
tatggcggga ggcgagacat gttggcagca atgctgcctt gttatgcttt actccacaga 300
tgtttgggcg gagggaaaca taaatctggc ctacgtgcac atccaggcat agtacctccc 360
tttgaactta attatgacac agattccttt gctcacatgt ttttttgctg accttctcct 420
tattatcacc ctgctctcct accgcattcc ttgtgctgag ataataaaaa taatatcaat 480
aaaaacttga nggaactcgg agaccactac gtcgatata 519

```

<210> 241

<211> 771

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 304, 402, 442, 463, 510, 541, 550, 567, 571, 596, 617, 624, 644, 648, 652, 667, 682, 686, 719, 722, 729, 732, 751, 752, 757, 758, 760, 763, 766, 769

<223> n = A,T,C or G

<400> 241

```

tgtatcgacg tagtggcttc cactcccggc ttgacggggc tgctatctgc cttccaggcc 60
actgtcacgg ctcccgggta gaagtcactt atgagacaca ccagtgtggc cttgttggct 120
tgaagctcct cagaggaggg tgggaacaga gtgaccgagg gggcagcctt gggctgacct 180
aggacgggtca gcttggctcc tccgccaac acgagagtgc tgctgcttgt atatgactg 240
cagtaataat cagcctcgtc ctgagcctgg agcccagaga tggtcaggga ggccgtgttg 300
ccanacttgg agccagagaa gccgattagg acccctgagg gccgattacc gacctcataa 360
atcatgaatt tgggggcttt gcctgggtgc tgttggtaacc angagacatt attataacca 420

```

```

ccaacgtcac tgctggttcc antgcagga aaatggttga tcnactgtc caagaaaacc 480
actacgtcca taccaatcca ctaattgcn gccgcctgca ggttcaacca tattggggaa 540
naactccccc ccgccgtttg ggattgncat naacctttga aattttttcc tattanttgt 600
ccccctaaaa taaacnnttg ggcnttaatc cattgggtcc atancntntt tncccggttt 660
ttaaaanttg tttatcccg cncnctatc ccccccaac tttccaaaac ccgaaacnt 720
tnaaattnt tnaaacctg ggggggtccc nnaattnnan ttnaancnc c 771

```

```

<210> 242
<211> 167
<212> DNA
<213> Homo sapiens

```

```

<400> 242
tgggcacctt caatatcggg ctcatcgata acatcacgct gctgatgctg ctgttgctgg 60
tcctctctag gaacctctgg attttcaa atctttgagga attcatccaa attatctgcc 120
tctcctcctt tcctcctttt tctaaggtct tctggtacaa gcggtca 167

```

```

<210> 243
<211> 338
<212> DNA
<213> Homo sapiens

```

```

<400> 243
ttgggcacct tcaatatcta ctgatctaaa tagtgtggtt tgaggcctct tgttcctggc 60
taaaaatcct tggcaagagt caatctccac tttacaatag aggtaaaaat cttacaatgg 120
atattcttga caaagctagc atagagacag caattttaca caaggtatct ttcacctgtt 180
taataacagt ggttttccta caccatagg gtgccaccaa gggaggagtg cacagttgca 240
gaaacaaatt aagatactga agacaacact acttaccatt tcccgtatag ctaaccacca 300
gttcaactgt acatgtatgt tcttatgggc aatcaaga 338

```

```

<210> 244
<211> 346
<212> DNA
<213> Homo sapiens

```

```

<400> 244
tttttggtc ccatacagca cactctcatg ggaaatgtct gttctaagg caaccataa 60
tgcaaaaatc atcaatatac ttgaagatcc ccgtgtaagg tacaatgtat ttaatatatt 120
cactgataca attgatccaa taccagtttt agtctggcat tgaatcaaat cactgttttt 180
gttgataaaa aagagaaata tttagcttat atttaagtac catattgtaa gaaaaaagat 240
gcttatcttt acatgctaaa atcatgatct gtacattggt gcagtgaata ttactgtaaa 300
agggaagaag gaatgaagac gagctaagga tattgaagg gcccaa 346

```

```

<210> 245
<211> 521
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 252, 337, 434, 455, 466, 478, 494, 510, 516
<223> n = A,T,C or G

```

```

<400> 245

```

```

accaatccca cacggatact gagggacaag tatatcatcc catttcatcc ctacagcagc 60
aacttcatga ggcaggaggt attagtccca ttttacagaa gaggaaactg agacttaggg 120
agatcaagta atttgccag gtcgcacaat tagtgataga gccagggtt gaagcgacgt 180
ctgtcttaag ccaatgaccc ctgcagatta ttagagcaac tggtctccac aacagtgtaa 240
gcctcttgct anaagctcag gtccacaagg gcagagattt ttgtctgttt tgctcattgc 300
tccttcccca ttgcttagag cagggtctgc cacgaancag gttctcaatg catagttatt 360
aaatgtatat aagagcaaac atatgttaca gagaactttc tgtatgcttg tcacttacat 420
gaatcacctg tganatgggt atgcttggtc cccantgttg cagatnaaga tattgaangt 480
gcccaaatca ctanttgcg ggcgctgcan gtccancata t 521

```

<210> 246

<211> 482

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 464

<223> n = A,T,C or G

<400> 246

```

tggaaccaat ccaaataccc atcaatgata gactggataa agaaaatttg gcacatgttc 60
accatgaaat actatgcagc cataaaaaag gatgagttca tatcctttgc agggacatgg 120
atgaagctgg agaccatcat tctcagcaaa ctaacaaggg aacagaaaac caaacactgc 180
atgttctcac tcttaagtgg gagctgaaca atgagaacac atggacacag ggaggggaac 240
atcacacagt ggggcctgct ggtgggtagg ggtctagggg agggatagca ttaggagaaa 300
tacctaattg agatgacggg ttgatgggtg cagcaaacca ccatgacacg tgtataccta 360
tgtaacaaac ctgcatgttc tgcacatgta cccagaact taaagtgtta ataaaaaaat 420
taagaaaaaa gttaagtatg tcatagatac ataaaatatt gtanatattg aagggtgccc 480
aa 482

```

<210> 247

<211> 474

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 220, 255, 287, 312, 339, 374, 382, 403, 414, 426, 427, 428, 432, 433, 434, 435, 436, 465

<223> n = A,T,C or G

<400> 247

```

ttcgatacag gcacagagta agcagaaaaa tggctgtggt ttaaccaagt gagtacagtt 60
aagtgagaga ggggcagaga agacaagggc atatgcaggg ggtgattata acagggtggt 120
gtgctgggaa gtgagggtac tcggggatga ggaacagtga aaaagtggca aaaagtggta 180
agatcagtga attgtacttc tccagaattt gatttctggn ggagtcaa atactatccag 240
tttggggtat catanggcaa cagttgaggt ataggaggta gaagtcncag tgggataatt 300
gaggttatga anggtttggt actgactggt actgacaang tctgggttat gaccatggga 360
atgaatgact gtanaagcgt anaggatgaa actattccac ganaaagggg tccnaaaact 420
aaaaannnaa gnnnnngggg aatattattt atgtggatat tgaangtgcc caaa 474

```

<210> 248

<211> 355

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 69, 87, 186, 192, 220, 227, 251, 278, 339, 346, 350

<223> n = A,T,C or G

<400> 248

```

ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt 60
ccggatggnc acgaagacgc actgganacac gtgcttacgt ccttttgctc tgttgatggc 120
cctgagggga cgcaggaccc ttatgaccct cagaatcttc acaacgggag atggcactgg 180
attgantccc antgacacca gagacacccc aaccaccagn atatcantat attgatgtag 240
ttcctgtaga nggccccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat 300
ctcaacagtt tccgatggct gtgatgggca tagtcatant taacntgtn tcgaa 355

```

<210> 249

<211> 434

<212> DNA

<213> Homo sapiens

<400> 249

```

ttggattggt cctccaggag aacaagggga aaaagggtgac cgaggggctcc ctggaactca 60
aggatctcca ggagcaaaag gggatggggg aattcctggt cctgctgggc ccttaggtcc 120
acctggtcct ccaggcttac caggtcctca aggcccaaag ggtaacaaag gctctactgg 180
acccgctggc cagaaagggt acagtgggtc tccagggcct cctgggcctc caggtccacc 240
tggtgaagtc attcagcctt taccaatctt gtccctccaaa aaaacgagaa gacatactga 300
aggcatgcaa gcagatgcag atgataatat tcttgattac tcggatggaa tggaagaaat 360
atttggttcc ctcaattccc tgaacaaga catcgagcat atgaaatttc caatgggtac 420
tcagaccaat ccaa 434

```

<210> 250

<211> 430

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 301, 430

<223> n = A,T,C or G

<400> 250

```

tggattggtc acatggcaga gacaggattc caaggcagtg agaggaggat acaatgcttc 60
tcactagtta ttattattta ttttattttt gagatgaagt ctgcctttgt ctcccaggct 120
ggagagcggt ggtgcatctt tggctctctg caacccccgc ctcaagcaat tctcctgtct 180
tagcctcgcg ggtagatgga attacaggcg cccaccgccca tgcccaacta atttttttgt 240
gtcttcagta gagacagggt ttcgccatgt tgggcaggct ggtcttgaaac tcttgacctc 300
nagtgatctg cctcctcctg cctcacaagg tgctggaatt acaggcatgg gctgctgcac 360
ccagtcaact tctcactagt tatggcctta tcattttcac cacattctat tggcccaaaa 420
aaaaaaaaan 430

```

<210> 251

<211> 329

<212> DNA

<213> Homo sapiens

<400> 251

```

tggtactcca ccatyatggg gtcaaccgcc atcctcgccc tctcctggc tgttctccaa 60
ggagtctgtg ccgaggtgca gctgrtgag tctggagcag aggtgaaaaa gtccggggag 120
tctctgaaga tctcctgtaa gggttctgga tacaccttta agatctactg gatcgctgg 180
gtgcgccagt tgcccggaag aggcctggag tggatggggc tcatctttcc tgatgactct 240
gataccagat acagcccgtc ctccaaggc caggtcacca tctcagtcga taagtcctac 300
agcaccgct atctgcagt gagtaccaa 329

```

<210> 252

<211> 536

<212> DNA

<213> Homo sapiens

<400> 252

```

tggtactcca ctcagcccaa ccttaattaa gaattaagag ggaacctatt actattctcc 60
caggctcctc tgcctaaccc aggcctctgg gacagtatta gaaaaggatg tctcaacaag 120
tatgtagatc ctgtactggc ctaagaagtt aaactgagaa tagcataaat cagaccaaac 180
ttaatgggtc ttagacttg tgcctggag cagctgggat aggaaaactt ttgggcagca 240
agaggaagaa ctgcctggaa gggggcatca tgttaaaaaa tacaagggga acccacacca 300
ggcccccttc ccagctctca gcctagagta ttagcatttc tcagctagag actcacaact 360
tccttgctta gaatgtgcca ccggggggag tccctgtggg tgatgaggct ctcaagagt 420
agagtggcat cctatcttct gtgtgccac aggagcctgg ccgagactt agcaggtgaa 480
gtttctggtc caggctttgc ccttgactca ctatgtgacc tctgggtggag taccaa 536

```

<210> 253

<211> 507

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 1

<223> n = A,T,C or G

<400> 253

```

ntgttgcat cccagtaact cgggaagctg aggcgggag atcacctgag ctcaggaggt 60
tgaggccgca gtgagccggg accacgccac tacactccag cctggggcat agagtgagac 120
cctccaagac agaaaagaaa agaaaggaag ggaaaggga agggaaaagg aaaaggaaaa 180
ggaaaaggaa aaggaaaaga caagacaaaa caagacttga atttggatct cctgacttca 240
attttatgtt ctttctacac cacaattcct ctgcttacta agatgataat ttagaaaccc 300
ctcgttccat tctttacagc aagctggaag tttggtcaag taattacaat aatagtaaca 360
aatttgaata ttatatgcca ggtgttttct attcctgctc tcacttaatt ctcaccactc 420
tgatataaat acaattgctg ccgggtgtgg tggctcatgc ctgtaatccc ggcactttgg 480
gagaccgagg tgggcgggats gcaacaa 507

```

<210> 254

<211> 222

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 167

<223> n = A,T,C or G

<400> 254

```
ttggattggt cactgtgagg aagccaaatc ggatccgaga gtctttttct aaaggccagt 60
actggccaca ctttctcctg ccgccttcct caaagctgaa gacacacaga gcaaggcgct 120
tctgttttac tccccaatgg taactccaaa ccatagatgg ttagctnccc tgctcatctt 180
tccacatccc tgctattcag tatagtccgt ggaccaatcc aa 222
```

<210> 255

<211> 463

<212> DNA

<213> Homo sapiens

<400> 255

```
tgttgcgac cataaatgct gaaatggaaa taaacaacat gatgagggag gattaagttg 60
gggagggagc acattaaggt ggccatgaag tttgttggaa gaagtgactt ttgaacaagg 120
ccttggtggt aagagctgat gagagtgtcc cagacagagg ggccactggt acaatagacg 180
agatgggaga gggccttgaa ggtgtgcgaa atagggaagg gtttgttctg gtatgagtct 240
agtgaacaca gaggcgagag gccctgggtg gtgcagctgg agagtatatc agaataacat 300
taggccctgt gggggactgt agactgtcag caataatcca cagtttggat tttattctaa 360
gagtgatggg aagccgtgga aaggggggta agcaaggagt gaaattatca gatttacagt 420
gataaaaata aattggtctg gctactgggg aaaaaaaaaa aaa 463
```

<210> 256

<211> 262

<212> DNA

<213> Homo sapiens

<400> 256

```
ttggattggt caacctgctc aactctacyt ttcctccttc ttcttaaaaa attaatgaat 60
ccaatacatt aatgccaaaa cccttggggt ttatcaatat ttctgttaaa aagtattatc 120
cagaactgga cataatacta cataataata cataacaacc ccttcatctg gatgcaaaca 180
tctattaata tagcttaaga tcactttcac tttacagaag caacatcctg ttgatgttat 240
tttgatgttt ggaccaatcc aa 262
```

<210> 257

<211> 461

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 25, 32, 38, 71, 72

<223> n = A,T,C or G

<400> 257

```
gnngnnnnnn nnncaattcg actcngttcc cntggtancc ggtcgacatg gccgcgggat 60
taccgcttgt nncgtgggggt gtatggggga ctatgaccgc ttgtagctgg ggggtgatgg 120
gggactatga ccgcttgtag mtggkgtgt atgggggact atgaccgctt gtcgggtggt 180
cggataaacc gacgcaaggg acgtgatcga agctgcgttc ccgctcttcc gcacgggtag 240
ggatcatgga gacgaatcgc cgcattcgyc tgaaggcggt cgaccatcgc gtgctcgatc 300
aggcgaccgg cgacatcgcc gacaccgcac gccgtaccgg cgcgctcatc cgcgggtccga 360
tcccgcttcc cacgcgcacg gagaagttca cggccaaccg tggccccgac gtcgacaaga 420
```

agtcgcgcga gcagttcgag gtgcgtacct acaagcggtc a

461

<210> 258

<211> 332

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 251

<223> n = A,T,C or G

<400> 258

```
tgaccgcttg tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg 60
ggggactatg accgcttgta gctgggggtg tatgggggac tatgaccgct ttagctggg 120
ggtgtatggg ggactaggac cgcttgtagc tgggggtgta tgggggacta tgaccgcttg 180
tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg ggggactatg 240
accgcttgta nctgggggtg tatgggggac tatgaccgct tgtgctgcct ggggatggg 300
aggagagttg tggttgggga aaaaaaaaaa aa 332
```

<210> 259

<211> 291

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 141, 144, 167, 168, 171, 175, 194, 201, 202, 205, 209, 212, 235, 236, 245, 246, 258, 266, 268, 270, 273, 277, 285, 290

<223> n = A,T,C or G

<400> 259

```
taccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt 60
gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt 120
gaccgcttgt gaccgcttgt nacnggggtg gtctggggga ctatgannga ntgtnactgg 180
gggtgtctgg gggncatga nngantgtna cnggggggtg ctgggggact atganngact 240
gtgcnnctg ggggatcnga ggagantngn ggntagnat ggttngggan a 291
```

<210> 260

<211> 238

<212> DNA

<213> Homo sapiens

<400> 260

```
taagagggta ctggttaaaa tacaggaaat ctggggtaat gaggcagaga accaggatac 60
tttgaggtca gggatgaaaa ctagaatttt tttctttttt tttgcctgag aaacttgctg 120
ctctgaagag gccatgtat taattgcttt gatcttcott ttcttacagc cttttcaagg 180
gcagagccct cttatcctg aaggaatctt atccttagct atagtatgta ccctctta 238
```

<210> 261

<211> 746

<212> DNA

<213> Homo sapiens

<220>
 <221> misc_feature
 <222> 662, 680, 685, 698, 707, 709, 734, 740, 741
 <223> n = A,T,C or G

<400> 261
 ttgggcacct tcaatatcaa tagctaacat ttattgagtg tttatcgtat cataaaacac 60
 tgttctaagc ctttaaagct actaatcat ttaatgctca taatcacttt agaaggtggg 120
 tactagtatt agtctcattt acagatgcaa catgcaggca cagagagggt aattaacttg 180
 cccaaggtaa cacagctaag aaatagaaaa aatattgaat ctggaaagtt gggcttctgg 240
 gtaaccacaca gagtcttcaa tgagcctggg gcctcactca gtttgctttt acaaagcgaa 300
 tgagtaacat cacttaattc agtgagtagg ccaaaggag gtcagctacg agtttctgct 360
 gttcttgtag tggaactgaca gatgtttaca acgtctggcc atcagtwaat ggactgatta 420
 tcattgggaw gtgggtgggc tgaatgttgg ccagtgaagt ttattcawgc catattttta 480
 tgtttaggat gacttttggc tggctcctagg gcaagctctg tctgscacgg aacacagaat 540
 wacacaggga cccctcaat ttctggtgtg gctagaacca tgaaccactg gttgggggaa 600
 caagcgggtca aaacctaagt gcggccggct ggcagggtcc acccatatgg ggaaaactcc 660
 cnacgcgttt ggaatgcctn agctngaatt attctaanag ttgtccnct aaaattagcc 720
 tgggcgttaa tcangggctn naagcc 746

<210> 262
 <211> 588
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 485, 488, 489, 492, 493, 494, 496, 497, 498, 499, 502, 503,
 504, 506, 521, 537, 550, 564
 <223> n = A,T,C or G

<400> 262
 tgaccgcttg tcatctcaca tggggctcctg cacgcttttg cctttgtagg aaacctgaca 60
 tttgtctgtt tcttctttct cttttccttc ccatactctc ctaatttacg tttgacttgt 120
 ttgctgagga ggcaggagct agagactgct gtgagctcat aggggtggga agtttatcct 180
 tcaagtcctg cccactcatc actgcttctc accttccctt gaccaggctt acaagtgggt 240
 tcttgctgct tttccctttg gacccaacaa gccctgttaa tgagtgtgca tgactctgac 300
 agctgtggac tcagggtcct tggctacagc tgccatgtaa aatatctcat ccagttctcg 360
 caaattgtta aaataaccac atttcttaga ttccagtacc caaatcatgt ctttacgaac 420
 tgctcctcac acccagaagt ggcacaataa ttcttgggga attattactt ttttttttct 480
 ctctnttnc gnnngnnnng gnnngnccag gaattaccac nttggaagac ctggccngaa 540
 tttattatan aggggagccg attntttttc ctaacacaaa gcgggtca 588

<210> 263
 <211> 730
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 124, 510, 534, 559, 604, 605, 635, 711, 729
 <223> n = A,T,C or G

<400> 263

```

tttttttttt tttggcctga gcaactgaaa ttatgaaatt tccatatact caaaagagta 60
agactgcaaa aagattaaat gtaaaagttg tcttgatac agtaatgttt aagataccta 120
ttanatttat aaatggaaaa ttagggcatt tggatataca agttgaaaat tcaggagtga 180
ggttgggctg gctgggtata tactgaaaac tgtcagtaca cagatgacat ctaaaaccac 240
aaatctgggt ttatttttagc agtgatatgt gtcactccca caaaagcctt cccaattggc 300
ctcagcatac acaacaagtc aacctccccc agccctctac acataaaca attccttagt 360
ttagttcagg aggaaatgcg cctttttcct tccgctctag gtgaccgcaa ggcccagttc 420
tcgtcaccaa gatgttaagg gaagtctgcc aaagaggcat ctgaaaggaa ataaggggaa 480
tgaggagtac cacaaggaa agccaaggan aaactttgga gaccgtttct aganccctgg 540
catttcacaa caaaactcng gaacaaacct tgtctcatca atcatttaag cccttcgttt 600
ggannagact ttctgaactg ggcgctgaac ataancctca ttgaatgtct tcacagtctc 660
ccagctgaag gcacaccttg ggccagaagg ggaatcttcc aggtcctcaa nacagggctc 720
gccctttgnc 730

```

<210> 264

<211> 715

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 364, 451, 476, 494, 495, 515, 519, 524, 633, 635, 636, 645, 647, 649, 657, 692, 695, 701, 707, 710, 713

<223> n = A,T,C or G

<400> 264

```

tttttttttt tttggccagt atgatagtct ctaccactat attgaagctc ttaggtcatt 60
tacacttaat gtggttatag atgctgttga gcttacttct accaccttgc tatttctccc 120
gtctcttttt tgttcctttt ctctcttttt cctcccttat tttataattg aatttttttag 180
gattctatatt tatatagatt tatcagctat aacactttgt attcttttgt tttgtggttc 240
ttctgtcatt tcaatgtgca tcttaaactc atcacaatct attttcaaat aatatcatat 300
aaccttacat ataatgtaag aatctaccac catatatctt catttctccc ttccatccta 360
tgtntgtcat attttttcct ttatatatgt tttaaagaca taatagtata tgggagggtt 420
ttgcttaaaa tgtgatcaat attccttcaa ngaaacgtaa aaattcaaaa taaatntctg 480
tttattctca aatnnaccta atatttccta ccatntctna tacntttcaa gaatctgaag 540
gcattgggtt tttccggctt aagaacctcc tctaaagcac tctaagcaga attaatgtct 600
ctgggagagg aattctccca agcttgggcc ttanantgta ctcontnang gttaaanttt 660
ggccgggaaa tagaaattcc aagttaacag gntanttttt nttttnttn tcncc 715

```

<210> 265

<211> 152

<212> DNA

<213> Homo sapiens

<400> 265

```

tttttttttt tttcccaaca caaagcacca ttatctttcc tcacaatttt caacatagtt 60
tgattcccat gaagagggtta tgatttctaa agaaaacatg gctactatac tatcaatcag 120
ggttaaattct tttttttttg agacggagtt ta 152

```

<210> 266

<211> 193

<212> DNA

<213> Homo sapiens

<220>
 <221> misc_feature
 <222> 180
 <223> n = A,T,C or G

<400> 266
 taaactccgt ccccttctta atcaatatgg aggctaccca ctccacatta ccttcttttc 60
 aagggactgt ttccgtaact gtgtgggta ttcacgacca ggcttctaaa cctcttaaaa 120
 ctccccaatt ctggtgccaa cttggacaac atgctttttt tttttttttt tttttttttt 180
 gagacggagt tta 193

<210> 267
 <211> 460
 <212> DNA
 <213> Homo sapiens

<400> 267
 tgttgcgatc ccttaagcat ggtgctatt aaaaaaatgg tggagaagaa aatacctgga 60
 atttacgtct tatctttaga gattgggaag accctgatgg aggacgtgga gaacagcttc 120
 ttcttgaatg tcaattccca agtaacaaca gtgtgtcagg cacttgctaa ggatcctaaa 180
 ttgcagcaag gctacaatgc tatgggattc tcccaggagg gccaatctct gagggcagtg 240
 gctcagagat gcccttcacc tcccatgac aatctgatct cggttggggg acaacatcaa 300
 ggtgtttttg gactccctcg atgccagga gagagctctc acatctgtga cttcatccga 360
 aaaacactga atgctggggc gtactccaaa gttgttcagg aacgcctcgt gcaagccgaa 420
 tactggcatg acccataaaa ggaggatgtg gatcgcaaca 460

<210> 268
 <211> 533
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 450, 470
 <223> n = A,T,C or G

<400> 268
 tgttgcgatc cgttgataga atagcgacgt ggtaatgagt gcatggcacg cctccgactt 60
 accttcgccc gtggggaccc cgagtacgtc tacggcgctg tcacttagag taccctctgg 120
 acgcccgggc gcgttcgatt taccggaagc gcgagctgca gtgggcttgc gcccccgccc 180
 aaattctttg gggggtttaa ggccgcgggg aatttgaggt atctctatca gtatgtagcc 240
 aagttggaac agtcgccatt cccgaaatcg ctttctttga atccgcaccg cctccagcat 300
 tgccctcattc atcaacctga aggcacgcat aagtgaacgt tgtgtcttca gcagctccac 360
 tccataacta gcgcgctcga cctcgtcttc gtacgcgcca ggtccgtgag tgcgaattcc 420
 caactccggt gagttgcgca tttcaagttt cgaaactggt cgcctccacn atttggcatg 480
 ttcacgcatg acacggaata aactcgtcca gtaccgggaa tgggatcgca aca 533

<210> 269
 <211> 50
 <212> DNA
 <213> Homo sapiens

<400> 269
 tttttttttt ttgcgctgaa ttagctacag atcctcctca caagcgggtca 50

```
<400> 273
tttttttttt ttggcaatca acagggtttaa gtcttcggcc gaagttaatc tcgtgttttt 60
ggcaatcaac aggtttaagt cttcggccga agttaatctc gtgttttttg caatcaacag 120
```

```

gtttaagtct tcggccgaag ttaatctcgt gtttttggca atcaacaggt ttaagtcttc 180
ggccgaagtt aatctcgtgt ttttggcaat caacaggttt aagtcttcgg ccgaagttaa 240
tctcgtgttt ttggcaatca acagggttaa gtcttcggcc gaagttaatc tcgtgttttt 300
ggcaatcaag aggtttaagt cttcgccga agttaatctc gtgttttttg caatcaacag 360
gtttaagtct tcggccgaan ttaatctcgt gtttttggca atcaacaggt ttaantcttc 420
ggccgaagtt aatctcgtgt ttttggcaat caana 455

```

```

<210> 274
<211> 461
<212> DNA
<213> Homo sapiens

```

```

<400> 274
tttttttttt ttggccaata cccttgatga acatcaatgt gaaaatcctc ggtaaaatac 60
tggcaaacca aatccagcag cacatcaaaa agcttatcca ccatgatcaa gtgggcttca 120
tccttgggat gcaaggctgg ttcaacataa gaaaatcaat aaatgtaatc catcacataa 180
acagaaccaa agacaaaaac cacatgatta tctcaataga tgcagaaaag gccttggaca 240
aattcaacag cccttcatgc taaacactct taataaaacta gatattgatg gaatgtatct 300
caaaataata agagctatct atgacaaacc cacagccaat atcatactga atgggcaaag 360
actggaagca ttccctttga aaactggcac aagacaagga tgccctctct caccgctcct 420
attcaacata gtattggaag ttctggccag ggcaatcaag a 461

```

```

<210> 275
<211> 729
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 164, 193, 207, 215, 216, 220, 223, 241, 244, 254, 269, 271,
275, 290, 295, 298, 309, 318, 325, 326, 331, 352, 380, 401,
411, 420, 424, 426, 431, 433, 435, 438, 440, 442, 443, 448,
453, 464, 465, 468, 474, 475, 481, 487, 491, 503, 516
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 519, 530, 531, 542, 547, 549, 559, 561, 564, 582, 586, 587,
588, 589, 592, 595, 612, 614, 620, 631, 632, 635, 636, 644,
646, 649, 650, 651, 655, 657, 660, 661, 662, 663, 666, 672,
673, 674, 682, 687, 691, 693, 697, 700, 701, 704, 705
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 713, 715, 717, 718, 722, 726, 727
<223> n = A,T,C or G

```

```

<400> 275
tttttttttt ttggccaaca ccaagtcttc cacgtgggag gttttattat gttttacaac 60
catgaaaaca taggaaggtg gctgttacag caaacatttc agatagacga atcggccaag 120
ctccccaac ccaccttca cagcctcttc cacacgtctc ccanagattg ttgtccttca 180
cttgcaaatt canggatgtt ggaagtngac atttnnagtn gcnggaaccc catcagtga 240
ncantaagca gaantacgat gactttgana nacanctgat gaagaacacn ctacnganaa 300
ccctttctnt cgtgttanga tctcngtcc ntaactaatg cgccccctg cnggtccacc 360
atttgggaga actcccccn cgttgatcc ccccttgagt ntccattct ngtocccan 420

```

```
<210> 276
<211> 339
<212> DNA
<213> Homo sapiens
```

```
<210> 277
<211> 664
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 267, 534, 590, 601, 646, 657
<223> n = A,T,C or G
```

```
<210> 278
<211> 452
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> 430
<223> n = A,T,C or G
```

<400> 278

```

tgacctgaca ttgaggaaga gcacacacct ctgaaattcc ttaggttcag aagggcattt 60
gacacagagt gggcctctga taattcatga aatgcattct gaagtcaccc agaattggagg 120
ctgcaatctg ctgtgctttg ggggttgctt cactgtgctc ctggatatca cacaaaagct 180
gcaatccttc ttcttcaact aacattttgc agtatttgct gggattttta ctgcagacat 240
gatacatagc ccatagtgcc cagagctgaa cctctgggtg agagaagttg ccaaggagcg 300
ggaaaaatgt cttgaaagat ctatagggtca ccaatgctgt catcttataa cttgaacttg 360
gccaatctct tatgggttgc tgcagatctt ggagaagagt acgcctctgg aagtcacggg 420
atatccaaan ctgtctgtca gatgtcaggt ca 452

```

<210> 279

<211> 274

<212> DNA

<213> Homo sapiens

<400> 279

```

tttttttttt ttcggcaagg caaatttact tctgcaaaag ggtgctgctt gcacttttgg 60
ccactgcgag agcacaccaa acaaagtagg gaagggggtt ttatccctaa cgcggttatt 120
ccctggttct gtgtcgtgtc cccattggct ggagtcagac tgcacaatct acactgaccc 180
aactggctac tgtttaaaat tgaatatgaa taattaggta ggaaggggga ggctgtttgt 240
tacggtacaa gacgtgtttg ggcattgtcag gtca 274

```

<210> 280

<211> 272

<212> DNA

<213> Homo sapiens

<400> 280

```

tacctgacat ggagaaataa cttgtagtat tttgcgtgca atggaatact atatgagggg 60
gaaaatgaat gaactagcaa tgcgtgtatc aacatgaata aatccccaaa acataataat 120
gttgaatgga aaaggtgagt ttcagaagga tatatatgcc ctctaaatcc atttatgtaa 180
acctttaaaa aactacatta tttatgggtc taagtccatc cagaaaatat ttaaaaacct 240
acatgggatt gataactact gatgtcaggt ca 272

```

<210> 281

<211> 431

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 339, 420, 430, 431

<223> n = A,T,C or G

<400> 281

```

tttttttttt ttggccaata gcatgattta aacattggaa aaagtcaaat gagcaatggg 60
aatttttatg ttctcttgaa taatcaaaag agtaggcaac attggttcct cattcttgaa 120
tagcattaat cagaaaatat tgcatagcct ctacccctct tagagtaggt gtgctctctc 180
aaatatatca tagtcccaca gtttatttca tgtatatatt ctgcctgaat cacatagaca 240
tttgaatttg caacgcctga tgtaaataa taaattctta ccaatcagaa acatagcaag 300
aaattcaggg acttgggtcat yatcagggtg tgacagcana tccctgtara aacactgata 360
cacactcaca cactgtatgca acgtggagat gtcgcyttww kkktywycwm rmrycrwogn 420
aatcacttan n 431

```

<210> 282
 <211> 98
 <212> DNA
 <213> Homo sapiens

<400> 282
 attcgattcg atgcttgagc ccaggagttc aagactgcag tgagccactg cacttcaggc 60
 tggacaacag agcgagtccc tgtgccaaaa aaaaaaaaa 98

<210> 283
 <211> 764
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 372, 374, 379, 380, 381, 382, 384, 387, 389, 392, 402, 409,
 411, 419, 421, 432, 440, 447, 452, 457, 466, 470, 471, 480,
 483, 492, 503, 506, 510, 512, 518, 520, 521, 524, 531, 534,
 536, 542, 545, 547, 550, 552, 553, 562, 566, 567, 575
 <223> n = A,T,C or G

<221> misc_feature
 <222> 580, 581, 584, 586, 587, 595, 598, 601, 603, 604, 606, 624,
 629, 630, 646, 651, 652, 653, 656, 659, 664, 665, 681, 691,
 700, 706, 709, 721, 724, 731, 732, 737, 741, 744, 745, 750,
 753, 754, 758
 <223> n = A,T,C or G

<400> 283
 tttttttttt ttcgcaagca cgtgcacttt attgaatgac actgtagaca ggtgtgtggg 60
 tataaactgc tgtatctagg ggcaggacca agggggcagg ggcaacagcc ccagcgtgca 120
 gggccascac tgcacagtgg astgcaaagg ttgcaggcta tgggcggcta ctavtaaccc 180
 cgtttttctt gtattatctg taacataata tggtagactg tcacagagcc gaatwccart 240
 hacasagatg atccaawggt caygaggatg ccacasaatca gggcccasat sttcaggcac 300
 ttggcgggtgg gggcatasgc ctgkgccccg gtcacgtcsc caaccwtcty cctgtcccta 360
 cmcttgawtc cncncctttn nntnccntna tntgcccgcc cncctcctng ngtaaacng 420
 natctgcact anctccctcn ccccttntgg antctcntcc ttcaantaan nttatccttn 480
 acnccccct cncctttccc ctncncnccn tnatcccngn nccnctatca ntentnccct 540
 cncntnctn cnnatcggtc cncctnntaa ctacncttn nacnanncc cactnatncc 600
 ngnnantttt ttccttccct ccnncgcnn tgcgtgcgcc cgtctngcct nnnctnecna 660
 ccnnaacttt atttaccttt ncaccctagc nctctacttn acccancnc tectacctcc 720
 nggnccaccc nncctnatc nctnntctn tcnntcntt cccc 764

<210> 284
 <211> 157
 <212> DNA
 <213> Homo sapiens

<400> 284
 caagtgtagg cacagtgatg aaagcctgga gcaaacacaa tctgtgggta attaacgttt 60
 atttctcccc ttccaggaac gtcttgcatg gatgatcaaa gatcagctcc tggtaacat 120
 aaataagcta gtttaagata cgttccccta cacttga 157

<210> 285
 <211> 150
 <212> DNA
 <213> Homo sapiens

<400> 285
 attcgattgt actcagacaa caatatgcta agtggagaa gtcagtcaca aaagaccaca 60
 tactgtatga cttcatttac attaagtgtc cagaataggc aaatccgtag agacagaaag 120
 tagatgagca gctgcctagg tctgagtaca 150

<210> 286
 <211> 219
 <212> DNA
 <213> Homo sapiens

<400> 286
 attcgatttt tttttttttg gccatgatga aattcttact ccctcagatt ttttgtctgg 60
 ataaatgcaa gtctcaccac cagatgtgaa attacagtaa actttgaagg aatctcctga 120
 gcaaccttgg ttaggatcaa tccaatattc accatctggg aagtcaggat ggctgagttg 180
 caggtcttta caagttcggg ctggattggg ctgagtaca 219

<210> 287
 <211> 196
 <212> DNA
 <213> Homo sapiens

<400> 287
 attcgattct tgaggctacc aggagctagg agaagaggca tggaacaaat tttccctcat 60
 atccatactc agaaggaacc aacctgtctg acaccttaat ttcagcttct ggcctctaga 120
 actgtgagag agtacatttc tcttggttta agccaagaga atctgtcttt tgggtacttta 180
 tatcatagcc tcaaga 196

<210> 288
 <211> 199
 <212> DNA
 <213> Homo sapiens

<400> 288
 attcgatttc agtccagtcc cagaaccac attgtcaatt actactctgt araagattca 60
 tttgttgaaa ttcattgagt aaaacattta tgatccctta atatatgcc attaccatgc 120
 taggtactga agattcaagt gaccgagatg ctagcccttg ggttcaagt atccctctcc 180
 cagagtgcac tggactgaa 199

<210> 289
 <211> 182
 <212> DNA
 <213> Homo sapiens

<400> 289
 attcgattct tgaggctaca aacctgtaca gtatgttact ctactgaata ctgtaggcaa 60
 tagtaataca gaagcaagta tctgtatatg taaacattaa aaaggtacag tgaaacttca 120
 gtattataat ctaggggacc accattatat atgtggtcca tcattggcca aaaaaaaaaa 180
 aa 182

<210> 290
 <211> 1646
 <212> DNA
 <213> Homo sapiens

<400> 290
 ggcacgagga gaaatgtaat tccatatttt atttgaaact tattccatat ttttaattgga 60
 tattgagtga ttgggttatc aaacaccac aaactttaat tttgttaa atatatggct 120
 ttgaaataga agtataagtt gctaccattt tttgataaca ttgaaagata gtattttacc 180
 atctttaatc atcttgaaa atacaagtcc tgtgaacaac cactctttca cctagcagca 240
 tgaggccaaa agtaaaggct ttaaattata acatatggga ttcttagtag tatgtttttt 300
 tcttgaaact cagtggctct atctaaccct actatctcct cactctttct ctaagactaa 360
 actctaggct cttaaaaatc tgcccacacc aatcttagaa gctctgaaa gaatttgtct 420
 ttaaataatct tttaatagta acatgtattt tatggaccaa attgacattt tcgactattt 480
 tttccaaaaa agtcagggtga atttcagcac actgagttgg gaatttctta tcccagaaga 540
 ccaaccaatt tcatatttat ttaagattga ttccatactc cgttttcaag gagaatccct 600
 gcagtcctct taaaggtaga acaaatactt tctatttttt tttcaccatt gtgggattgg 660
 actttaagag gtgactctaa aaaaacagag aacaaatatg tctcagttgt attaagcacg 720
 gacccatatt atcatattca cttaaaaaaa tgattttctg tgcacctttt ggcaacttct 780
 cttttcaatg tagggaaaaa cttagtcacc ctgaaaaccc acaaaataaa taaaacttgt 840
 agatgtgggc agaaggtttg ggggtggaca ttgtatgtgt ttaaattaaa cctgtatca 900
 ctgagaagct gttgtatggg tcagagaaaa tgaatgctta gaagctgttc acatcttcaa 960
 gagcagaagc aaaccacatg tctcagctat attattattt attttttatg cataaagtga 1020
 atcatttctt ctgtattaat ttccaaaggg ttttaccctc tattttaa atgtgaaaa 1080
 cagtgcattg acaatgggtt gatatttttc tttaaaagaa aaatataatt atgaaagcca 1140
 agataatctg aagcctgttt tattttaaaa ctttttatgt tctgtgggtg atgttggttg 1200
 tttgtttgtt tctattttgt tggtttttta ctttgttttt tgttttggtt tgttttggtt 1260
 kgcatactac atgcagttct ttaaccaatg tctgtttggc taatgtaatt aaagttgtta 1320
 atttatatga gtgcatttca actatgtcaa tggtttctta atatttattg tgtagaagta 1380
 ctggtaattt ttttatttac aatatgttta aagagataac agtttgatat gttttcatgt 1440
 gtttatagca gaagttattt atttctatgg cattccagcg gatatttttg tgtttgcgag 1500
 gcatgcagtc aatattttgt acagtttagt gacagtattc agcaacgcct gatagcttct 1560
 ttggccttat gttaaataaa aagacctgtt tgggatgtat tttttatttt taaaaaaaaa 1620
 aaaaaaaaaa aaaaaaaaaa aaaaaa 1646

<210> 291
 <211> 1851
 <212> DNA
 <213> Homo sapiens

<400> 291
 tcatcaccat tgccagcagc ggcaccgtta gtcaggtttt ctgggaatcc cacatgagta 60
 cttccgtgtt cttcattctt cttcaatagc cataaatctt ctactctctg ctggctgttt 120
 tcacttcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga 180
 ttgctgtttt cagaagagat ttttaacatc tgtttttctt tgtagtcaga aagtaactgg 240
 caaattacat gatgatgact agaaacagca tactctctgg cctcttttcc agatcttgag 300
 aagatacatc aacattttgc tcaagtagag ggctgactat acttgotgat ccacaacata 360
 cagcaagtat gagagcagtt cttccatata tatccagcgc attttaaattc gcttttttct 420
 tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtgggtgtga 480
 ggccatgctt gttttttgat tcgatatacag caccgtataa gagcagtgct ttggccatta 540
 atttatcttc attgtagaca gcatagtgtg gagtgggtatt tccatactca tctggaatat 600
 ttggatcagt gccatgttcc agcaacatta acgcacattc atcttctctg cattgtacgg 660
 cttttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca 720
 gcacgagttt tactacttct gaattcccat tggcagaggg cagatgtaga gcagtcctct 780

```

tttgettgtc cctcttggtc acatccgtgt ccttgagcat gacgatgaga tcctttctgg 840
ggactttacc ccaccaggca gctctgtgga gcttgtccag atcttctcca tggacgtggt 900
acctgggatc catgaaggcg ctgtcatcgt agtctcccca agcgaccacg ttgctcttgc 960
cgctcccctg cagcagggga agcagtggca gcaccacttg cacctcttgc tcccaagcgt 1020
cttcacagag gagtctgtgt ggtctccaga agtgcccacg ttgctcttgc cgctcccct 1080
gtccatccag ggaggaagaa atgcaggaaa tgaaagatgc atgcacgatg gtatactcct 1140
cagccatcaa acttctggac agcaggtcac ttccagcaag gtggagaaag ctgtccaccc 1200
acagaggatg agatccagaa accacaatat ccattcacia acaaacactt ttcagccaga 1260
cacaggtact gaaatcatgt catctgcggc aacatggtgg aacctacca atcacacatc 1320
aagagatgaa gacactgcag tatatctgca caacgtaata ctcttcatcc ataacaaaat 1380
aatataatth tcctctggag ccatatggat gaactatgaa ggaagaactc cccgaagaag 1440
ccagtcgcag agaagccaca ctgaagctct gtccctcagcc atcagcgcca cggacaggar 1500
tgtgtttctt cccagtgat gcagcctcaa gttatccga agctgccgca gcacacggtg 1560
gtccttgaga aacaccccag ctcttccggt ctaacacagg caagtcaata aatgtgataa 1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca 1680
tttgacaaaa tccagcatcc ttgtatttat tggtgcagtt ctgagaggaa atgcttctaa 1740
cttttcccca tttagtatta tggtggctgt gggcttgatc taggtgggtt ttattacttt 1800
aaggtatgtc ccttctatgc ctgttttgc gagggtttta attctcgtgc c 1851

```

<210> 292

<211> 1851

<212> DNA

<213> Homo sapiens

<400> 292

```

tcatcaccat tgccagcagc ggcaccgtta gtcagggttt ctgggaatcc cacatgagta 60
cttccgtggt cttcattctt cttcaatagc cataaatctt ctgctctgg ctggctgttt 120
tcacttcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga 180
ttgctgtttt cagaagagat ttttaacatc tgtttttctt tgtagtcaga aagtaactgg 240
caaattacat gatgatgact agaaacagca tactctctgg cctcttttcc agatcttgag 300
aagatacatc aacattttgc tcaagtagag ggctgactat acttgctgat ccacaacata 360
cagcaagtat gagagcagtt cttccatata tatccagcgc atttaaattc gcttttttct 420
tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtgggtgtga 480
ggccatgctt gtttttgcag tcgatatcag caccgtataa gagcagtgct ttggccatta 540
atthtatctt attgttagaca gcatagtgta agtggttatt tccatactca tctggaatat 600
ttggatcagt gccatgttcc agcaacatta acgcacatcc atcttctctg cattgtacgg 660
cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca 720
gcacgagttt tactacttct gaattcccat tggcagaggc cagatgtaga gcagtcctct 780
tttgettgtc cctcttggtc acatccgtgt ccttgagcat gacgatgaga tcctttctgg 840
ggactttacc ccaccaggca gctctgtgga gcttgtccag atcttctcca tggacgtggt 900
acctgggatc catgaaggcg ctgtcatcgt agtctcccca agcgaccacg ttgctcttgc 960
cgctcccctg cagcagggga agcagtggca gcaccacttg cacctcttgc tcccaagcgt 1020
cttcacagag gagtctgtgt ggtctccaga agtgcccacg ttgctcttgc cgctcccct 1080
gtccatccag ggaggaagaa atgcaggaaa tgaaagatgc atgcacgatg gtatactcct 1140
cagccatcaa acttctggac agcaggtcac ttccagcaag gtggagaaag ctgtccaccc 1200
acagaggatg agatccagaa accacaatat ccattcacia acaaacactt ttcagccaga 1260
cacaggtact gaaatcatgt catctgcggc aacatggtgg aacctacca atcacacatc 1320
aagagatgaa gacactgcag tatatctgca caacgtaata ctcttcatcc ataacaaaat 1380
aatataatth tcctctggag ccatatggat gaactatgaa ggaagaactc cccgaagaag 1440
ccagtcgcag agaagccaca ctgaagctct gtccctcagcc atcagcgcca cggacaggar 1500
tgtgtttctt cccagtgat gcagcctcaa gttatccga agctgccgca gcacacggtg 1560
gtccttgaga aacaccccag ctcttccggt ctaacacagg caagtcaata aatgtgataa 1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca 1680
tttgacaaaa tccagcatcc ttgtatttat tggtgcagtt ctgagaggaa atgcttctaa 1740

```

```

cttttcccca tttagtatta tgttggctgt gggcttgtca taggtgggtt ttattacttt 1800
aaggtatgtc ccttctatgc ctgttttgc gagggtttta attctcgtgc c 1851

```

```

<210> 293
<211> 668
<212> DNA
<213> Homo sapiens

```

```

<400> 293
cttgagcttc caaataygga agactggccc ttacacasgt caatgttaaa atgaatgcat 60
ttcagtatatt tgaagataaa attgtagat ctataccttg ttttttgatt cgatatcagc 120
accrtataag agcagtgcct tggccattaa tttatctttc attttagaca gortagtgya 180
gagtgggtatt tccatactca tctggaatat ttggatcagt gccatgttcc agcaacatta 240
acgcacattc atcttctctg cattgtacgg cctgtcagta ttagacccaa aaacaaatta 300
catatcttag gaattcaaaa taacattcca cagctttcac caactagtta tatttaaagg 360
agaaaactca tttttatgcc atgtattgaa atcaaaccac cctcatgctg atatagttgg 420
ctactgcata cctttatcag agctgtcctc tttttgttgt caaggacatt aagttgacat 480
cgtctgtcca gcaggagttt tactacttct gaattcccat tggcagaggc cagatgtaga 540
gcagtcctat gagagtgaga agacttttta ggaaattgta gtgcactagc tacagccata 600
gcaatgattc atgtaactgc aaacactgaa tagcctgcta ttactctgcc ttcaaaaaaa 660
aaaaaaa 668

```

```

<210> 294
<211> 1512
<212> DNA
<213> Homo sapiens

```

```

<400> 294
gggtcgccca gggggsgcgt gggctttcct cgggtgggtg tgggttttcc ctgggtgggg 60
tgggctgggc trgaatcccc tgctggggtt ggcaggtttt ggctgggatt gaacttttytc 120
ttcaaacaga ttggaacccc ggagttacct gctagtgtgt gaaactggtt ggtagacgcg 180
atctgttggc tactactggc ttctcctggc tgttaaaagc agatggtggt tgaggttgat 240
tccatgcceg ctgcttcttc tgtgaagaag ccatttggtc tcaggagcaa gatgggcaag 300
tgggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct 360
ggagaccacg acgactctgc tatgaagaca ctcaggagca agatgggcaa gtggtgccc 420
cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac 480
gacgaytctg ctatgaagac actcaggaac aagatgggca agtgggtgctg cactgcttcc 540
ccctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagt 600
gccttcatgg agcccaggta ccacgtccgt ggagaagatc tggacaagct ccacagagct 660
gcctgggtggg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cactgacgtg 720
aacaagaagg acaagcaaaa gaggactgct ctacatctgg cctctgccaa tgggaattca 780
gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag 840
aggacagctc tgaayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg 900
gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct ractaygct 960
rtctayaatg aagataaatt aatggccaaa gcactgctct tataygggtg tgatatcgaa 1020
tcaaaaaaca aggtatagat ctactaattt tatcttcaaa atactgaaat gcattcattt 1080
taacattgac gtgtgtaagg gccagtcttc cgtatttgga agctcaagca taacttgaat 1140
gaaaatattt tgaaatgacc taattatctm agactttatt ttaaattatt ttattttcaa 1200
agaagcatta gagggtagag tttttttttt ttaaattgcac ttctggtaaa tacttttgtt 1260
gaaaacactg aatttgtaaa aggtaatact tactattttt caatttttcc ctctaggat 1320
ttttttcccc taatgaatgt aagatggcaa aatttgcctt gaaataggtt ttacatgaaa 1380
actccaagaa aagttaaaca tgtttcagtg aatagagatc ctgctccttt ggcaagttcc 1440
taaaaaacag taatagatac gaggtgatgc gcctgtcagt ggcaaggttt aagatatttc 1500
tgatctcgtg cc 1512

```

<210> 295
 <211> 1853
 <212> DNA
 <213> Homo sapiens

<400> 295
 ggggtcgccca gggggsgcgt gggctttcct cgggtgggtg tgggttttcc ctgggtgggg 60
 tgggtctgggc trgaatcccc tgctgggggtt ggcaggtttt ggctgggatt gacttttytc 120
 ttcaaacaga ttgaaaaccc ggagttacct gctagtgtgt gaaactgggt ggtagacgcg 180
 atctgttggc tactactggc ttctcctggc tgttaaaagc agatggtggt tgaggttgat 240
 tccatgccgg ctgctttcttc tgtgaagaag ccatttggtc tcaggagcaa gatgggcaag 300
 tgggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct 360
 ggagaccacg acgactctgc tatgaagaca ctgaggagca agatgggcaa gtggtgccgc 420
 cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac 480
 gacgaytctg ctatgaagac actcaggaac aagatgggca agtgggtgctg cactgcttc 540
 cctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagy 600
 gccttcattgg akcccaggta ccacgtccrt ggagaagatc tggacaagct ccacagagct 660
 gcctgggtggg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cackgaygtg 720
 aacaagargg acaagcaaaa gaggactgct ctacatctgg cctctgcaa tgggaattca 780
 gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag 840
 aggacagctc tgayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg 900
 gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct ractaygct 960
 rtctayaatg aagataaatt aatggccaaa gcactgctct tatayggtgc tgatatcgaa 1020
 tcaaaaaaca agcatggcct cacaccactg ytacttggtt tacatgagca aaaacagcaa 1080
 gtsgtgaaat ttttaatyaa gaaaaaagcg aatttaaaat gcrctggata gatatggaag 1140
 ractgctctc atacttgctg tatgttgtgg atcagcaagt atagtcagcc ytctacttga 1200
 gcaaaatrtrt gatgtatctt ctcaagatct ggaaagacgg ccagagagta tgctgtttct 1260
 agtcatcatc atgtaatttg ccagttactt tctgactaca aagaaaaaca gatgttaaaa 1320
 atctcttctg aaaacagcaa tccagaacaa gacttaaaagc tgacatcaga ggaagagtca 1380
 caaaggctta aaggaagtga aaacagccag ccagaggcat ggaaactttt aaatttaaac 1440
 ttttggttta atgttttttt tttttgctt aataatatta gatagtccca aatgaaatwa 1500
 cctatgagac taggctttga gaatcaatag attctttttt taagaatctt ttggctagga 1560
 cgggtgtctc acgcctgtaa ttccagcacc ttgagaggct gaggtgggca gatcacgaga 1620
 tcaggagatc gagaccatcc tggctaacac ggtgaaaccc catctctact aaaaatacaa 1680
 aaacttagct ggtgtgtgtg gcgggtgcct gtgtgccag ctactcagga rgctgaggca 1740
 ggagaatggc atgaaccgag gaggtggagg ttgcagttag ccgagatccg ccactacact 1800
 ccagcctggg tgacagagca agactctgtc tcaaaaaaaa aaaaaaaaaa aaa 1853

<210> 296
 <211> 2184
 <212> DNA
 <213> Homo sapiens

<400> 296
 ggcacgagaa ttaaaaccct cagcaaaaca ggcatagaag ggacatacct taaagtaata 60
 aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca 120
 ttctctctga gaactgcaac aataaatata aggatgctgg attttgtcaa atgccttttc 180
 tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat 240
 ttattgactt gcctgtgtta gaccggaaga gctgggggtg ttctcaggag ccaccgtgtg 300
 ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytccgtgct 360
 gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttogg 420
 ggagttcttc cttcatagtt catccatagt gctccagagg aaaattatat tattttgtta 480
 tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga 540

```

ttgggtaggt tccaccatgt tgccgcagat gacatgattt cagtacctgt gtctggctga 600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca 660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcattcttc atttcctgca tttcttcctc cctggatgga cagggggagc 780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg 840
agcaagaggt gcaagtgggt ctgccactgc ttccctgct gcaggggagc ggcaagagca 900
acgtgggtcgc ttggggagac tacgatgaca gcgccttcac ggatcccagg taccacgtcc 960
atggagaaga tctggacaag ctccacagag ctgcctggtg gggtaaagtc cccagaaagg 1020
atctcatcgt catgctcagg gacacggatg tgaacaagag ggacaagcaa aagaggactg 1080
ctctacatct ggcctctgcc aatgggaatt cagaagtagt aaaactcgtg ctggacagac 1140
gatgtcaact taatgtcctt gacaacaaaa agaggacagc tctgacaaag gccgtacaat 1200
gccaggaaga tgaatgtgcg ttaatgttgc tggaaacatgg cactgatcca aatattccag 1260
atgagtatgg aaataccact ctacactatg ctgtctacaa tgaagataaa ttaatggcca 1320
aagcactgct cttatacggg gctgatatcg aatcaaaaaa caagcatggc ctcacaccac 1380
tgctacttgg tatacatgag caaaaacagc aagtggtgaa atttttaatc aagaaaaaag 1440
cgaatttaaa tgcgctggat agatatgaa gaactgctct catacttgct gtatgttgtg 1500
gatcagcaag tatagtacgc cctctacttg agcaaaatgt tgatgtatct tctcaagatc 1560
tggaagagac gccagagagt atgctgttct tagtcatcat catgtaattt gccagttact 1620
ttctgactac aaagaaaaac agatgttaaa aatctcttct gaaaacagca atccagaaca 1680
agacttaag ctgacatcag aggaagagtc acaaaggctt aaaggaagtg aaaacagcca 1740
gccagaggca tggaaacttt taaatttaaa cttttggttt aatgtttttt ttttttgctt 1800
taataatatt agatagtccc aaatgaaatw acctatgaga ctaggctttg agaatcaata 1860
gattcttttt ttaagaatct tttggctagg agcgggtgtct cacgcctgta attccagcac 1920
cttgagaggc tgaggtgggc agatcacgag atcaggagat cgagaccatc ctggctaaca 1980
cggtgaaacc ccactctctac taaaaataca aaaacttagc tgggtgtggg ggcggtgccc 2040
tgtagtccca gctactcagg argctgaggc aggagaatgg catgaaccog ggaggtggag 2100
gttgacgtga gccgagatcc gccactacac tccagcctgg gtgacagagc aagactctgt 2160
ctcaaaaaaa aaaaaaaaaa aaaa 2184

```

```

<210> 297
<211> 1855
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 606
<223> n = A,T,C or G

```

```

<400> 297
tgcacgcac gccagtgct tgtgccacgt acactgacgc cccctgagat gtgcacgccg 60
cacgcgcac ttgcacgcgc ggcagcggct tggctggctt gtaacggctt gcacgcgcac 120
gcgcgcgcgc cataaccgtc agactggcct gtaacggctt gcaggcgcac gccgcacgcg 180
cgtaacggct tggctgccct gtaacggctt gcacgtgcat gctgcacgcg cgtaaacggc 240
ttggctggca tgtagccgct tggcttggct ttgcatttct tgctkggctk ggcgttgkty 300
tcttgattg acgttctctc cttggatkga cgttctctcc ttggatkga gtttcttyty 360
tcgcgttctt ttgctggact tgacctttty tctgctgggt ttggcattcc tttgggtggg 420
gctgggtgtt ttctccgggg gggktkgccc ttctgggggt gggcgtgggk cgccccagc 480
gggcgtgggc tttccccggg tgggtgtggg ttttctggg gtgggtggg ctgtgctggg 540
atccccctgc tggggttggc agggattgac tttttcttc aaacagattg gaaaccggga 600
gtaacntgct agttggtgaa actggttggg agacgcgac tgctgtgact actgtttctc 660
ctggctgtta aaagcagatg gtggctgagg ttgattcaat gccggtgct tcttctgtga 720
agaagcatt tgggtctcagg agcaagatgg gcaagtgggt cgccactgct tccctgctg 780
cagggggagc ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa 840

```

gacgcttggg agcaagaggt gcaagtgggt ctgccactg cttccctgc tgcaggggag 900
 cggcaagagc aacgtggkcg cttggggaga ctacgatgac agcgccttca tggakcccag 960
 gtaccacgtc crtggagaag atctggacaa gctccacaga gctgcctggg ggggttaaagt 1020
 ccccagaaag gatctcatcg tcatgctcag ggacactgay gtgaacaaga rggacaagca 1080
 aaagaggact gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt 1140
 gctggacaga cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa 1200
 ggccgtacaa tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcaactgatcc 1260
 aaatattcca gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa 1320
 attaattggc aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaagggtata 1380
 gatctactaa ttttatcttc aaaatactga aatgcattca ttttaacatt gacgtgtgta 1440
 agggccagtc ttccgtatctt ggaagctcaa gcataacttg aatgaaaata ttttgaaatg 1500
 acctaattat ctaagacttt attttaaata ttgttatctt caaagaagca ttagagggta 1560
 cagttttttt tttttaaatg cacttctggt aaatactttt gttgaaaaca ctgaatttgt 1620
 aaaaggtaat acttactatt tttcaatttt tccctcctag gatttttttc ccctaattgaa 1680
 tgtaagatgg caaaatttgc cctgaaatag gttttacatg aaaactccaa gaaaagttaa 1740
 acatgtttca gtgaatagag atcctgctcc tttggcaagt tcctaaaaaa cagtaataga 1800
 tacgaggtga tgcgcctgtc agtggcaagg tttaagatat ttctgatctc gtgcc 1855

<210> 298
 <211> 1059
 <212> DNA
 <213> Homo sapiens

<400> 298
 gcaacgtggg cacttctgga gaccacaacg actcctctgt gaagacgctt gggagcaaga 60
 ggtgcaagtg gtgctgcca ctgcttcccc tgctgcaggg gagcggcaag agcaacgtgg 120
 gcgcttgrgg agactmcgat gacagygcct tcatggagcc caggtaccac gtccgtggag 180
 aagatctgga caagctccac agagctgcc tgggtgggta aagtccccag aaaggatctc 240
 atcgtcatgc tcagggacac tgaygtgaac aagarggaca agcaaaagag gactgctcta 300
 catctggcct ctgccaatgg gaattcagaa gtatgtaaac tcstgctgga cagacgatgt 360
 caacttaatg tccttgacaa caaaaagagg acagctctga yaaaggccgt acaatgccag 420
 gaagatgaat gtgcgttaat gttgctggaa catggcactg atccaaatat tccagatgag 480
 tatggaaata ccactctrca ctaygctrct tayaatgaag ataaattaat ggccaaagca 540
 ctgctcttat ayggtgctga tatcgaatca aaaaacaagg tatagatcta ctaattttat 600
 cttcaaaaata ctgaaatgca ttcattttta cattgacgtg tgtaagggcc agtcttccgt 660
 atttgggaagc tcaagcataa cttgaatgaa aatattttga aatgacctaa ttatctaaga 720
 ctttatttta aatattgtta ttttcaaaga agcattagag ggtacagttt ttttttttta 780
 aatgcacttc tggtaaatac ttttgttgaa aacactgaat ttgtaaaagg taatacttac 840
 tatttttcaa tttttccctc ctaggatttt tttcccctaa tgaatgtaag atggcaaaat 900
 ttgccctgaa ataggtttta catgaaaact ccaagaaaag ttaaacaatgt ttcagtgaat 960
 agagatcctg ctcttttggc aagttcctaa aaaacagtaa tagatacgag gtgatgcgcc 1020
 tgtcagtggc aaggtttaag atatttctga tctcgtgcc 1059

<210> 299
 <211> 329
 <212> PRT
 <213> Homo sapiens

<400> 299
 Met Asp Ile Val Val Ser Gly Ser His Pro Leu Trp Val Asp Ser Phe
 1 5 10 15
 Leu His Leu Ala Gly Ser Asp Leu Leu Ser Arg Ser Leu Met Ala Glu
 20 25 30
 Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Ser

35 40 45
 Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg
 50 55 60
 Pro Gln Arg Leu Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val
 65 70 75 80
 Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val
 85 90 95
 Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr
 100 105 110
 His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp
 115 120 125
 Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp
 130 135 140
 Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
 145 150 155 160
 Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys
 165 170 175
 Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala
 180 185 190
 Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly
 195 200 205
 Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr
 210 215 220
 Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr
 225 230 235 240
 Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
 245 250 255
 Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys
 260 265 270
 Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu
 275 280 285
 Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu
 290 295 300
 Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu
 305 310 315 320
 Ser Met Leu Phe Leu Val Ile Ile Met
 325

<210> 300
 <211> 148
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 3, 46, 69, 88, 124
 <223> Xaa = Any Amino Acid

<400> 300
 Met Thr Xaa Pro Ser Trp Ser Pro Gly Thr Thr Ser Val Glu Lys Ile
 1 5 10 15
 Trp Thr Ser Ser Thr Glu Leu Pro Trp Trp Gly Lys Val Pro Arg Lys
 20 25 30

Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Xaa Asp Lys
 35 40 45
 Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu
 50 55 60
 Val Val Lys Leu Xaa Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp
 65 70 75 80
 Asn Lys Lys Arg Thr Ala Leu Xaa Lys Ala Val Gln Cys Gln Glu Asp
 85 90 95
 Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro
 100 105 110
 Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Xaa Tyr Asn Glu Asp
 115 120 125
 Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser
 130 135 140
 Lys Asn Lys Val
 145

<210> 301
 <211> 1155
 <212> DNA
 <213> Homo sapiens

<400> 301
 atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttgggtctc 60
 aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggaag 120
 agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag 180
 atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg 240
 ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag 300
 tgggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg 360
 ggagactacg atgacagtgc cttcatggag ccaggtacc acgtccgtgg agaagatctg 420
 gacaagctcc acagagctgc ctggtggggt aaagtcccc gaaaggatct catcgatctg 480
 ctgagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc 540
 tctgccaatg ggaattcaga agtagtaaaa ctctgctgg acagacgatg tcaacttaat 600
 gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa 660
 tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat 720
 accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta 780
 tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttgggtgta 840
 catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca 900
 ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata 960
 gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg 1020
 gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac 1080
 aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga 1140
 accagaaata aataa 1155

<210> 302
 <211> 2000
 <212> DNA
 <213> Homo sapiens

<400> 302
 atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttgggtctc 60
 aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggaag 120
 agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag 180

atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg 240
 ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag 300
 tgggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg 360
 ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg 420
 gacaagctcc acagagctgc ctggtggggg aaagtcccca gaaaggatct catcgatcatg 480
 ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc 540
 tctgccaatg ggaattcaga agtagtaaaa ctctgctgg acagacgatg tcaacttaat 600
 gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa 660
 tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat 720
 accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta 780
 tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta 840
 catgagcaaa aacagcaagt cgtgaaatct ttaatcaaga aaaaagcgaa tttaaatgca 900
 ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata 960
 gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg 1020
 gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac 1080
 aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaca agacttaaaag 1140
 ctgacatcac aggaagagtc acaaagggtc aaaggcagtg aaaatagcca gccagagaaa 1200
 atgtctcaag aaccagaaat aaataaggat ggtgatagag aggttgaaga agaaatgaag 1260
 aagcatgaaa gtaataatgt gggattacta gaaaacctga ctaatggtgt cactgctggc 1320
 aatgggtgata atggattaat tcctcaaagg aagagcagaa cacctgaaaa tcagcaattt 1380
 cctgacaacg aaagtgaaga gtatcacaga atttgcgaat tagtttctga ctacaaagaa 1440
 aaacagatgc caaaatactc ttctgaaaac agcaaccagc aacaagactt aaagctgaca 1500
 tcagaggaag agtcacaaag gcttgagggc agtgaaaatg gccagccaga gctagaaaat 1560
 tttatggcta tcgaagaaat gaagaagcac ggaagtactc atgtcggatt cccagaaaac 1620
 ctgactaatg gtgccactgc tggcaatggt gatgatggat taattcctcc aaggaagagc 1680
 agaacacctg aaagccagca atttcctgac actgagaatg aagagtatca cagtgcgaa 1740
 caaaatgata ctgagaagca attttgtaaa gaacagaaca ctggaatatt acacgatgag 1800
 attctgattc atgaagaaaa gcagatagaa gtggttgaaa aaatgaattc tgagctttct 1860
 cttagttgta agaaagaaaa agacatcttg catgaaaata gtacgttgcg ggaagaaatt 1920
 gccatgctaa gactggagct agacacaatg aaacatcaga gccagctaaa aaaaaaaaaa 1980
 aaaaaaaaaa aaaaaaaaaa 2000

<210> 303

<211> 2040

<212> DNA

<213> Homo sapiens

<400> 303

atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc 60
 aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggaag 120
 agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag 180
 atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg 240
 ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag 300
 tgggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg 360
 ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg 420
 gacaagctcc acagagctgc ctggtggggg aaagtcccca gaaaggatct catcgatcatg 480
 ctcagggaca ctgacgtgaa caagaaggac aagcaaaaga ggactgctct acatctggcc 540
 tctgccaatg ggaattcaga agtagtaaaa ctctgctgg acagacgatg tcaacttaat 600
 gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa 660
 tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat 720
 accactctgc atacgctat ctataatgaa gataaattaa tggccaaagc actgctctta 780
 tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta 840
 catgagcaaa aacagcaagt cgtgaaatct ttaatcaaga aaaaagcgaa tttaaatgca 900
 ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata 960

```

gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg 1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac 1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaca agacttaaag 1140
ctgacatcag aggaagagtc acaaagggtc aaaggcagtg aaaatagcca gccagagaaa 1200
atgtctcaag aaccagaaat aaataaggat ggtgatagag aggttgaaga agaaatgaag 1260
aagcatgaaa gtaataatgt gggattacta gaaaacctga ctaatggtgt cactgctggc 1320
aatggtgata atggattaat tcctcaaagg aagagcagaa cacctgaaaa tcagcaattt 1380
cctgacaacg aaagtgaaga gtatcacaga atttgcgaat tagtttctga ctacaaagaa 1440
aaacagatgc caaaatactc ttctgaaaac agcaaccag aacaagactt aaagctgaca 1500
tcagaggaag agtcacaaag gcttgagggc agtgaaaatg gccagccaga gaaaagatct 1560
caagaaccag aaataataaa ggatggtgat agagagctag aaaattttat ggctatcgaa 1620
gaaatgaaga agcacggaag tactcatgtc ggattccag aaaacctgac taatggtgcc 1680
actgctggca atggtgatga tggattaatt cctccaagga agagcagaac acctgaaagc 1740
cagcaatttc ctgacactga gaatgaagag tatcacagt acgaacaaaa tgatactcag 1800
aagcaatttt gtgaagaaca gaacactgga atattacacg atgagattct gattcatgaa 1860
gaaaagcaga tagaagtggg tgaaaaaatg aattctgagc tttctcttag ttgtaagaaa 1920
gaaaaagaca tcttgcatga aaatagtagc ttgcgggaag aaattgccat gctaagactg 1980
gagctagaca caatgaaaca tcagagccag ctaaaaaaa aaaaaaaaaa aaaaaaaaaa 2040

```

```

<210> 304
<211> 384
<212> PRT
<213> Homo sapiens

```

```

<400> 304
Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 1          5          10          15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
 20          25          30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
 35          40          45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
 50          55          60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
 65          70          75          80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
 85          90          95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
100          105          110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
115          120          125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
130          135          140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145          150          155          160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
165          170          175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
180          185          190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
195          200          205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
210          215          220

```

```
<210> 305
<211> 656
<212> PRT
<213> Homo sapiens
```

Met 1	Val	Val	Glu	Val 5	Asp	Ser	Met	Pro	Ala 10	Ala	Ser	Ser	Val	Lys 15	Lys
Pro	Phe	Gly	Leu 20	Arg	Ser	Lys	Met	Gly 25	Lys	Trp	Cys	Cys	Arg 30	Cys	Phe
Pro	Cys 35	Cys	Arg	Glu	Ser	Gly	Lys 40	Ser	Asn	Val	Gly	Thr 45	Ser	Gly	Asp
His 50	Asp	Asp	Ser	Ala	Met	Lys 55	Thr	Leu	Arg	Ser	Lys 60	Met	Gly	Lys	Trp
Cys 65	Arg	His	Cys	Phe	Pro 70	Cys	Cys	Arg	Gly	Ser 75	Gly	Lys	Ser	Asn	Val 80
Gly	Ala	Ser	Gly	Asp 85	His	Asp	Asp	Ser	Ala 90	Met	Lys	Thr	Leu 95	Arg	Asn
Lys	Met	Gly	Lys 100	Trp	Cys	Cys	His	Cys 105	Phe	Pro	Cys	Cys	Arg 110	Gly	Ser
Gly	Lys	Ser 115	Lys	Val	Gly	Ala	Trp 120	Gly	Asp	Tyr	Asp	Asp 125	Ser	Ala	Phe
Met 130	Glu	Pro	Arg	Tyr	His	Val 135	Arg	Gly	Glu	Asp	Leu 140	Asp	Lys	Leu	His
Arg 145	Ala	Ala	Trp	Trp	Gly 150	Lys	Val	Pro	Arg	Lys 155	Asp	Leu	Ile	Val	Met 160
Leu	Arg	Asp	Thr 165	Asp	Val	Asn	Lys	Lys	Asp 170	Lys	Gln	Lys	Arg	Thr 175	Ala
Leu	His	Leu 180	Ala	Ser	Ala	Asn	Gly	Asn 185	Ser	Glu	Val	Val	Lys 190	Leu	Leu
Leu	Asp 195	Arg	Arg	Cys	Gln	Leu	Asn 200	Val	Leu	Asp	Asn	Lys 205	Lys	Arg	Thr

Ala 210	Leu 210	Ile 210	Lys 210	Ala 210	Val 215	Gln 215	Cys 215	Gln 215	Glu 215	Asp 220	Glu 220	Cys 220	Ala 220	Leu 220	Met 220
Leu 225	Leu 225	Glu 225	His 225	Gly 230	Thr 230	Asp 235	Pro 235	Asn 235	Ile 235	Pro 235	Asp 235	Glu 235	Tyr 235	Gly 240	Asn 240
Thr 245	Thr 245	Leu 245	His 245	Tyr 245	Ala 250	Ile 250	Tyr 250	Asn 250	Glu 250	Asp 250	Lys 250	Leu 250	Met 255	Ala 255	Lys 255
Ala 260	Leu 260	Leu 260	Leu 260	Tyr 260	Gly 265	Ala 265	Asp 265	Ile 265	Glu 265	Ser 265	Lys 265	Asn 270	Lys 270	His 270	Gly 270
Leu 275	Thr 275	Pro 275	Leu 275	Leu 275	Leu 275	Gly 280	Val 280	His 280	Glu 280	Gln 280	Lys 280	Gln 285	Gln 285	Val 285	Val 285
Lys 290	Phe 290	Leu 290	Ile 290	Lys 290	Lys 290	Lys 295	Ala 295	Asn 295	Leu 295	Asn 295	Ala 300	Leu 300	Asp 300	Arg 300	Tyr 300
Gly 305	Arg 305	Thr 305	Ala 305	Leu 305	Ile 310	Leu 310	Ala 310	Val 310	Cys 310	Cys 315	Gly 315	Ser 315	Ala 315	Ser 315	Ile 315
Val 320	Ser 320	Leu 320	Leu 320	Leu 320	Glu 325	Gln 325	Asn 325	Ile 325	Asp 330	Val 330	Ser 330	Ser 330	Gln 330	Asp 335	Leu 335
Ser 340	Gly 340	Gln 340	Thr 340	Ala 340	Arg 340	Glu 340	Tyr 345	Ala 345	Val 345	Ser 345	Ser 345	His 345	His 350	His 350	Val 350
Ile 355	Cys 355	Gln 355	Leu 355	Leu 355	Ser 355	Asp 355	Tyr 360	Lys 360	Glu 360	Lys 360	Gln 360	Met 365	Leu 365	Lys 365	Ile 365
Ser 370	Ser 370	Glu 370	Asn 370	Ser 370	Asn 370	Pro 375	Glu 375	Gln 375	Asp 375	Leu 375	Lys 375	Leu 380	Thr 380	Ser 380	Glu 380
Glu 385	Glu 385	Ser 385	Gln 385	Arg 385	Phe 390	Lys 390	Gly 390	Ser 390	Glu 390	Asn 390	Ser 390	Gln 390	Pro 390	Glu 395	Lys 395
Met 400	Ser 400	Gln 400	Glu 400	Pro 405	Glu 405	Ile 405	Asn 405	Lys 405	Asp 410	Gly 410	Asp 410	Arg 410	Glu 410	Val 415	Glu 415
Glu 420	Glu 420	Met 420	Lys 420	Lys 420	His 420	Glu 420	Ser 420	Asn 425	Asn 425	Val 425	Gly 425	Leu 425	Leu 430	Glu 430	Asn 430
Leu 435	Thr 435	Asn 435	Gly 435	Val 435	Thr 435	Ala 440	Gly 440	Asn 440	Gly 440	Asp 440	Asn 440	Gly 440	Leu 445	Ile 445	Pro 445
Gln 450	Arg 450	Lys 450	Ser 450	Arg 450	Thr 450	Pro 455	Glu 455	Asn 455	Gln 455	Gln 455	Phe 455	Pro 455	Asp 455	Asn 455	Glu 455
Ser 465	Glu 465	Glu 465	Tyr 465	His 465	Arg 465	Ile 470	Cys 470	Glu 470	Leu 470	Val 470	Ser 470	Asp 470	Tyr 470	Lys 470	Glu 475
Lys 485	Gln 485	Met 485	Pro 485	Lys 485	Tyr 485	Ser 485	Ser 485	Glu 485	Asn 485	Ser 485	Asn 485	Pro 485	Glu 485	Gln 485	Asp 485
Leu 500	Lys 500	Leu 500	Thr 500	Ser 500	Glu 500	Glu 500	Glu 500	Ser 500	Gln 500	Arg 500	Leu 500	Glu 500	Gly 500	Ser 500	Glu 500
Asn 515	Gly 515	Gln 515	Pro 515	Glu 515	Leu 515	Glu 515	Asn 515	Phe 515	Met 515	Ala 515	Ile 515	Glu 515	Glu 515	Met 515	Lys 515
Lys 530	His 530	Gly 530	Ser 530	Thr 530	His 530	Val 530	Gly 530	Phe 530	Pro 530	Glu 530	Asn 530	Leu 530	Thr 530	Asn 530	Gly 530
Ala 545	Thr 545	Ala 545	Gly 545	Asn 545	Gly 545	Asp 545	Asp 545	Gly 545	Leu 545	Ile 545	Pro 545	Pro 545	Arg 545	Lys 545	Ser 545
Arg 560	Thr 560	Pro 560	Glu 560	Ser 560	Gln 560	Gln 560	Phe 560	Pro 560	Asp 560	Thr 560	Glu 560	Asn 560	Glu 560	Glu 560	Tyr 560
His 580	Ser 580	Asp 580	Glu 580	Gln 580	Asn 580	Asp 580	Thr 580	Gln 580	Lys 580	Gln 580	Phe 580	Cys 580	Glu 580	Glu 580	Gln 580
Asn 595	Thr 595	Gly 595	Ile 595	Leu 595											

Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
645 650 655

<210> 306

<211> 671

<212> PRT

<213> Homo sapiens

<400> 306

Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
1 5 10 15
Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
20 25 30
Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
35 40 45
His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
50 55 60
Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
65 70 75 80
Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
85 90 95
Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
100 105 110
Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
115 120 125
Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
130 135 140
Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145 150 155 160
Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
165 170 175
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
180 185 190
Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
195 200 205
Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
210 215 220
Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
225 230 235 240
Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
245 250 255
Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
260 265 270
Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
275 280 285
Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
290 295 300
Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305 310 315 320
Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
325 330 335
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
340 345 350

Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
 355 360 365
 Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
 370 375 380
 Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
 385 390 395 400
 Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
 405 410 415
 Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
 420 425 430
 Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
 435 440 445
 Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
 450 455 460
 Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
 465 470 475 480
 Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
 485 490 495
 Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
 500 505 510
 Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile Asn Lys Asp
 515 520 525
 Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys
 530 535 540
 His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala
 545 550 555 560
 Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg
 565 570 575
 Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His
 580 585 590
 Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn
 595 600 605
 Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile
 610 615 620
 Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys
 625 630 635 640
 Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala
 645 650 655
 Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
 660 665 670

<210> 307
 <211> 800
 <212> DNA
 <213> Homo sapiens

<400> 307
 atkagcttcc gcttctgaca acactagaga tccctcccct ccctcagggt atggccctcc 60
 acttcatttt tggtacataa catctttata ggacagggtt aaaatcccaa tactaacagg 120
 agaatgctta ggactctaac aggtttttga gaatgtgttg gtaagggcca ctcaatccaa 180
 tttttcttgg tcctccttgg ggtctaggag gacaggcaag ggtgcagatt ttcaagaatg 240
 catcagtaag ggccactaaa tccgaccttc ctcgttcctc cttgtggtct gggaggaaaa 300
 ctagtgtttc tgttgctgtg tcagttagca caactattcc gatcagcagg gtccagggac 360

```

cactgcaggt tcttgggcag ggggagaaac aaaacaaacc aaaaccatgg gcrgttttgt 420
ctttcagatg ggaaacactc aggcacatcaac aggtcacct ttgaaatgca tcctaagcca 480
atgggacaaa tttgacccac aaaccctgga aaaagaggtg gctcattttt tttgcactat 540
ggcttggccc caacattctc tctctgatgg ggaaaaatgg ccacctgagg gaagtacaga 600
ttacaatact atcctgcagc ttgacctttt ctgtaagagg gaaggcaaat ggagtgaat 660
accttatgtc caagctttct tttcattgaa ggagaatata ctatgcaaag cttgaaattt 720
acatcccaca ggaggacctc tcagcttacc cccatatact agcctcccta tagctcccct 780
tcctattagt gataagcctc                                     800

```

<210> 308
 <211> 102
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 3
 <223> Xaa = Any Amino Acid

<400> 308

Met	Gly	Xaa	Phe	Val	Phe	Gln	Met	Gly	Asn	Thr	Gln	Ala	Ser	Thr	Gly
1				5				10						15	
Ser	Pro	Leu	Lys	Cys	Ile	Leu	Ser	Gln	Trp	Asp	Lys	Phe	Asp	Pro	Gln
			20					25					30		
Thr	Leu	Glu	Lys	Glu	Val	Ala	His	Phe	Phe	Cys	Thr	Met	Ala	Trp	Pro
			35				40					45			
Gln	His	Ser	Leu	Ser	Asp	Gly	Glu	Lys	Trp	Pro	Pro	Glu	Gly	Ser	Thr
			50			55					60				
Asp	Tyr	Asn	Thr	Ile	Leu	Gln	Leu	Asp	Leu	Phe	Cys	Lys	Arg	Glu	Gly
65					70				75					80	
Lys	Trp	Ser	Glu	Ile	Pro	Tyr	Val	Gln	Ala	Phe	Phe	Ser	Leu	Lys	Glu
				85				90						95	
Asn	Thr	Leu	Cys	Lys	Ala										
					100										

<210> 309
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Made in the lab

<400> 309
 Leu Met Ala Glu Glu Tyr Thr Ile Val
 1 5

<210> 310
 <211> 9
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Made in the lab

<400> 310

Lys Leu Met Ala Lys Ala Leu Leu Leu
 1 5

<210> 311

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in the lab

<400> 311

Gly Leu Thr Pro Leu Leu Leu Gly Ile
 1 5

<210> 312

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in the lab

<400> 312

Lys Leu Val Leu Asp Arg Arg Cys Gln Leu
 1 5 10

<210> 313

<211> 1852

<212> DNA

<213> Homo sapiens

<400> 313

```

ggcacgagaa ttaaaaccct cagcaaaaca ggcatagaag ggacatacct taaagtaata 60
aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca 120
tttctcttga gaactgcaac aataaatata aggatgctgg attttgtcaa atgccttttc 180
tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat 240
ttattgactt gcctgtgtta gaccggaaga gctgggggtg ttctcaggag ccaccgtgtg 300
ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytccctgtcc 360
gtggcgctga tggttgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg 420
ggagttcttc cttcatagtt catccatag gctccagagg aaaattatat tattttgtta 480
tgatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga 540
ttgggtaggt tccaccatgt tgccgcagat gacatgattt cagtacctgt gtctggctga 600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca 660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcacttttc atttctgca tttcttcctc cctggatgga cagggggagc 780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg 840

```

```

agcaagaggt gcaagtgggt ctgccactgc ttcccctgct gcagggggag cggcaagagc 900
aacgtgggtcg cttggggaga ctacgatgac agcgcccttca tggatcccag gtaccacgtc 960
catggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt ccccagaaag 1020
gatctcatcg tcatgctcag ggacacggat gtgaacaaga gggacaagca aaagaggact 1080
gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt gctggacaga 1140
cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa ggccgtacaa 1200
tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc aaatattcca 1260
gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa attaatggcc 1320
aaagcactgc tcttatacgg tgctgatata gaatcaaaaa acaagcatgg cctcacacca 1380
ctgctacttg gtatacatga gcaaaaacag caagtgggtga aattttttaat caagaaaaaa 1440
gcgaatttaa atgcgctgga tagatatgga agaactgctc tcataacttg tgtatgttgt 1500
ggatcagcaa gtatagtcag ccctctactt gagcaaaatg ttgatgtatc ttctcaagat 1560
ctggaaagac ggccagagag tatgctgttt ctagtcatca tcatgtaatt tgccagttac 1620
tttctgacta caaagaaaaa cagatgttaa aaatctcttc tgaaaacagc aatccagaac 1680
aagacttaaa gctgacatca gaggaagagt cacaaaggct taaaggaagt gaaaacagcc 1740
agccagagct agaagattta tggctattga agaagaatga agaacacgga agtactcatg 1800
tgggattccc agaaaacctg actaacgggt ccgctgctgg caatggtgat ga 1852

```

```

<210> 314
<211> 879
<212> DNA
<213> Homo sapiens

```

```

<400> 314
atgcatcttt catttcctgc atttcttctt ccctggatgg acagggggag cggcaagagc 60
aacgtgggca cttctggaga ccacaacgac tcctctgtga agacgcttgg gagcaagagg 120
tgcaagtggg gctgccactg cttcccctgc tgcaggggga gcggcaagag caacgtggtc 180
gcttggggag actacgatga cagcgcttcc atggatccca ggtaccacgt ccatggagaa 240
gatctggaca agctccacag agctgcctgg tggggtaaag tccccagaaa ggatctcatc 300
gtcatgtctc gggacacgga tctgaacaag agggacaagc aaaagaggac tgctctacat 360
ctggcctctg ccaatgggaa ttcagaagta gtaaaactcg tgctggacag acgatgtcaa 420
cttaatgtcc ttgacaacaa aaagaggaca gctctgacaa aggccgtaca atgccaggaa 480
gatgaatgtg cgtaaatgtt gctggaacat ggcaactgat caaatatttc agatgagtat 540
ggaaatacca ctctacacta tgctgtctac aatgaagata aattaatggc caaagcactg 600
ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
ggtatacatg agcaaaaaa gcaagtgggt aaatttttaa tcaagaaaaa agcgaattta 720
aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
agtatagtca gccctctact tgagcaaaat gttgatgtat cttctcaaga tctggaaaga 840
cggccagaga gtatgctgtt tctagtcata atcatgtaa 879

```

```

<210> 315
<211> 292
<212> PRT
<213> Homo sapiens

```

```

<400> 315
Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
      5              10              15

Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
      20              25              30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe

```

```
<210> 316
<211> 584
<212> DNA
<213> Homo sapiens
```

<400> 316
 agttgggcca aattcccctc ccctacagc ttgaagggga cataaccaat agcctgggggt 60
 ttttttggg tcctttggag atttctttgc ttattttctt ctgggtgggg gtgattagag 120
 gaggttattc actaatagga aggggagcta tagggaggct aggatatggg ggtaagctga 180
 gaggtcctcc tgtgggatgt aaatttcaag ctttgcatag tgtattctcc ttcaatgaaa 240
 agaaagcttg gacataaggt atttcaactc atttgccttc cctcttacag aaaagggtcaa 300
 gctgcaggat agtattgtaa tctgtacttc cctcagggtg ccatttttcc ccatcagaga 360
 gagaatgttg gggccaagcc atagtgcaga aaaaaaatg agccacctct ttttccaggg 420
 tttgtgggtc aaatttgtcc cattggctta ggatgcattt caaagggtgag cctgttgatg 480
 cctgagtgtt tcccatctga aagacaaaac tgcccatggt tttggtttgt tttgtttctc 540
 ccctgccca agaactatca aactcctgag ccaacaacta aaaa 584

<210> 317
 <211> 829
 <212> DNA
 <213> Homo sapiens

<400> 317
 attagcttcc gcttctgaca aactagaga tccctccct cctcagggt atggccctcc 60
 acttcatttt tggtacataa catctttata ggacaggggt aaaatcccaa tactaacagg 120
 agaatgctta ggactctaac aggtttttga gaatgtgttg gtaagggcca ctcaatccaa 180
 tttttcttgg tcctccttgt ggtctaggag gacaggcaag ggtgcagatt ttcaagaatg 240
 catcagtaag ggccactaaa tccgaccttc ctctgttctc cttgttgtct gggaggaaaa 300
 ctagtgtttc tgttgctgtg tcagtgcaga caactattcc gatcagcagg gtccaggggac 360
 cactgcagggt tcttgggcag ggggagaaac aaaacaaacc aaaaccatgg gcagttttgt 420
 ctttcagatg ggaaacactc aggcataaac aggtcacct ttgaaatgca tcctaagcca 480
 atgggacaaa tttgaccac aaacctgga aaaagagggt gctcattttt tttgcactat 540
 ggcttggccc caacattctc tctctgatgg ggaaaaatgg ccacctgagg gaagtacaga 600
 ttacaatact atcctgcagc ttgaccttt ctgtaagagg gaaggcaaat ggagtgaat 660
 accttatgtc caagctttct tttcattgaa ggagaatata ctatgcaaag cttgaaattt 720
 acatcccaca ggaggacctc tcagcttacc cccatatcct agcctcccta tagctcccct 780
 tctattagtg gataagcctc ctctaataac cccacccag aagaaaata 829

<210> 318
 <211> 30
 <212> PRT
 <213> Homo sapien

<400> 318
 Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
 1 5 10 15
 Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
 20 25 30

<210> 319
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>

<400> 319

41

<211> 41

<213> Artificial Sequence

<223> PCR primer

41

<211> 60

<213> Artificial Sequence

<223> PCR primer

50
60

<211> 42

<213> Artificial Sequence

<223> PCR primer

42

<211> 1590

<213> Homo sapiens

60

```
<210> 324
<211> 529
<212> PRT
<213> Homo sapiens
```

```

<400> 324
Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
          5                      10                      15

Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
          20                      25                      30

Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
          35                      40                      45

Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
          50                      55                      60

Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
          65                      70                      75                      80

Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
          85                      90                      95

Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
          100                      105                      110

```

Val	Thr	Trp	Gln	Thr	Lys	Ser	Gly	Gly	Thr	Arg	Thr	Gly	Asn	Val	Thr
		115					120					125			
Leu	Ala	Glu	Gly	Pro	Pro	Ala	Glu	Phe	Pro	Leu	Val	Pro	Arg	Gly	Ser
	130					135					140				
Pro	Met	Val	Val	Glu	Val	Asp	Ser	Met	Pro	Ala	Ala	Ser	Ser	Val	Lys
145					150					155					160
Lys	Pro	Phe	Gly	Leu	Arg	Ser	Lys	Met	Gly	Lys	Trp	Cys	Cys	Arg	Cys
				165					170					175	
Phe	Pro	Cys	Cys	Arg	Glu	Ser	Gly	Lys	Ser	Asn	Val	Gly	Thr	Ser	Gly
			180					185					190		
Asp	His	Asp	Asp	Ser	Ala	Met	Lys	Thr	Leu	Arg	Ser	Lys	Met	Gly	Lys
		195					200					205			
Trp	Cys	Arg	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser	Gly	Lys	Ser	Asn
	210					215					220				
Val	Gly	Ala	Ser	Gly	Asp	His	Asp	Asp	Ser	Ala	Met	Lys	Thr	Leu	Arg
225					230					235					240
Asn	Lys	Met	Gly	Lys	Trp	Cys	Cys	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly
				245					250					255	
Ser	Gly	Lys	Ser	Lys	Val	Gly	Ala	Trp	Gly	Asp	Tyr	Asp	Asp	Ser	Ala
			260					265					270		
Phe	Met	Glu	Pro	Arg	Tyr	His	Val	Arg	Gly	Glu	Asp	Leu	Asp	Lys	Leu
		275					280					285			
His	Arg	Ala	Ala	Trp	Trp	Gly	Lys	Val	Pro	Arg	Lys	Asp	Leu	Ile	Val
	290					295					300				
Met	Leu	Arg	Asp	Thr	Asp	Val	Asn	Lys	Lys	Asp	Lys	Gln	Lys	Arg	Thr
305					310					315					320
Ala	Leu	His	Leu	Ala	Ser	Ala	Asn	Gly	Asn	Ser	Glu	Val	Val	Lys	Leu
				325					330					335	
Leu	Leu	Asp	Arg	Arg	Cys	Gln	Leu	Asn	Val	Leu	Asp	Asn	Lys	Lys	Arg
			340					345					350		
Thr	Ala	Leu	Ile	Lys	Ala	Val	Gln	Cys	Gln	Glu	Asp	Glu	Cys	Ala	Leu
		355					360					365			
Met	Leu	Leu	Glu	His	Gly	Thr	Asp	Pro	Asn	Ile	Pro	Asp	Glu	Tyr	Gly
	370					375					380				
Asn	Thr	Thr	Leu	His	Tyr	Ala	Ile	Tyr	Asn	Glu	Asp	Lys	Leu	Met	Ala
385					390					395					400

Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His
405 410 415

Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val
420 425 430

Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg
435 440 445

Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser
450 455 460

Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp
465 470 475 480

Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His
485 490 495

Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys
500 505 510

Ile Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn
515 520 525

Lys

<210> 325

<211> 1155

<212> DNA

<213> Homo sapiens

<400> 325

```

atggtggctg aggtttgttc aatgccact gcctctactg tgaagaagcc atttgatctc 60
aggagcaaga tgggcaagtg gtgccaccac cgcttccctt gctgcagggg gagcggcaag 120
agcaacatgg gcacttctgg agaccacgac gactccttta tgaagatgct caggagcaag 180
atgggcaagt gttgccgcca ctgcttcccc tgctgcaggg ggagcggcac gagcaacgtg 240
ggcacttctg gagaccatga aaactccttt atgaagatgc tcaggagcaa gatgggcaag 300
tggtgctgtc actgcttccc ctgctgcagg gggagcggca agagcaacgt gggcgcttgg 360
ggagactacg accacagcgc cttcatggag ccgaggtacc acatccgtcg agaagatctg 420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcagt 480
ctcagggaca ctgacatgaa caagagggac aaggaaaaga ggactgctct acatttggcc 540
tctgccaatg gaaattcaga agtagtacia ctctgctgg acagacgatg tcaacttaat 600
gtccttgaca acaaaaaaag gacagctctg ataaaggcca tacaatgcca ggaagatgaa 660
tgtgtgttaa tgttgctgga acatggcgct gatcgaaata ttccagatga gtatggaaat 720
accgctctac actatgctat ctacaatgaa gataaattaa tggccaaagc actgctctta 780
tatggtgctg atattgaatc aaaaaacaag gttggcctca caccactttt gcttggcgta 840
catgaacaaa aacagcaagt ggtgaaatth ttaatcaaga aaaaagctaa tttaaagtta 900
cttgatagat atggaaggac tgccctcata cttgctgtat gttgtggatc agcaagtata 960
gtcaatcttc tacttgagca aaatgttgat gtatcttctc aagatctatc tggacagacg 1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gtgaattact ttctgactat 1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga 1140
accagaaata aataa 1155

```

```

<400> 326
Met Val Ala Glu Val Cys Ser Met Pro Thr Ala Ser Thr Val Lys Lys
          5                      10                      15

Pro Phe Asp Leu Arg Ser Lys Met Gly Lys Trp Cys His His Arg Phe
          20                      25                      30

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Met Gly Thr Ser Gly Asp
          35                      40                      45

His Asp Asp Ser Phe Met Lys Met Leu Arg Ser Lys Met Gly Lys Cys
          50                      55                      60

Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Thr Ser Asn Val
          65                      70                      75                      80

Gly Thr Ser Gly Asp His Glu Asn Ser Phe Met Lys Met Leu Arg Ser
          85                      90                      95

Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
          100                     105                     110

Gly Lys Ser Asn Val Gly Ala Trp Gly Asp Tyr Asp His Ser Ala Phe
          115                     120                     125

Met Glu Pro Arg Tyr His Ile Arg Arg Glu Asp Leu Asp Lys Leu His
          130                     135                     140

Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
          145                     150                     155                     160

Leu Arg Asp Thr Asp Met Asn Lys Arg Asp Lys Glu Lys Arg Thr Ala
          165                     170                     175

Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Gln Leu Leu
          180                     185                     190

Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
          195                     200                     205

Ala Leu Ile Lys Ala Ile Gln Cys Gln Glu Asp Glu Cys Val Leu Met
          210                     215                     220

Leu Leu Glu His Gly Ala Asp Arg Asn Ile Pro Asp Glu Tyr Gly Asn
          225                     230                     235                     240

Thr Ala Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
          245                     250                     255

```

Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys Val Gly
260 265 270

Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
275 280 285

Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Val Leu Asp Arg Tyr
290 295 300

Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305 310 315 320

Val Asn Leu Leu Leu Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu
325 330 335

Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
340 345 350

Ile Cys Glu Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
355 360 365

Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
370 375 380

<210> 327

<211> 634

<212> DNA

<213> Homo sapiens

<400> 327

```
gactgctcta catctggcct ctgccaatgg aaattcagaa gtagtaaaac tcctgctgga 60
cagacgatgt caacttaata tccttgacaa caaaaagagg acagctctga caaaggccgt 120
acaatgccag gaagatgaat gtgcgttaat gttgctggaa catggcactg atccgaatat 180
tccagatgag tatggaaata ccgctctaca ctatgctatc tacaatgaag ataaattaat 240
ggccaaagca ctgctcttat acggtgctga tatcgaatca aaaaacaagc atggcctcac 300
accactgtta cttggtgtac atgagcaaaa acagcaagtg gtgaaatttt taatcaagaa 360
aaaagcaaat ttaaattgcac tggatagata tggaagaact gctctcatal ttgctgtatg 420
ttgtggatcg gcaagtatag tcagccttct acttgagcaa aacattgatg tatcttctca 480
agatctatct ggacagacgg ccagagagta tgctgtttct agtcgtcata atgtaatttg 540
ccagttactt tctgactaca aagaaaaaca gataactaaa gtctcttctg aaaacagcaa 600
tccaggaaat gtctcaagaa ccagaaataa ataa 634
```

<210> 328

<211> 1155

<212> DNA

<213> Homo sapiens

<400> 328

```
atggtggttg aggttgattc catgccggct gcctcttctg tgaagaagcc atttggtctc 60
aggagcaaga tgggcaagtg gtgctgcogt tgcttcccct gctgcaggga gagcggcaag 120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag 180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg 240
ggcgcttctg gagaccaaga cgactctgct atgaagacac tcaggaacaa gatgggcaag 300
tgggtgctgcc actgcttccc ctgctgcagg gggagcagca agagcaaggt gggcgcttgg 360
```

```

ggagactacg atgacagtgc cttcatggag cccaggtacc acgtccgtgg agaagatctg 420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg 480
ctcagggaca ctgacgtgaa caagcaggac aagcaaaaga ggactgctct acatctggcc 540
tctgccaatg ggaattcaga agtagtaaaa ctctgctgg acagacgatg tcaacttaat 600
gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa 660
tgtgctgtaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat 720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta 780
tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttggtgta 840
catgagcaaa aacagcaagt cgtgaaatct ttaattaaga aaaaagcgaa tttaaatgca 900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata 960
gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg 1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac 1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga 1140
accagaaata aataa 1155

```

<210> 329

<211> 1155

<212> DNA

<213> Homo sapiens

<400> 329

```

atggtggctg aggtttgttc aatgcccgtc gcctctgctg tgaagaagcc atttgatctc 60
aggagcaaga tgggcaagtg gtgccaccac cgcttccctt gctgcagggg gagcggcaag 120
agcaacatgg gcacttctgg agaccacgac gactccttta tgaagacgct caggagcaag 180
atgggcaagt gttgccacca ctgcttcccc tgctgcaggg ggagcggcac gagcaatgtg 240
ggcacttctg gagaccatga caactccttt atgaagacac tcaggagcaa gatgggcaag 300
tggtgctgtc actgcttccc ctgctgcagg gggagcggca agagcaacgt gggcacttgg 360
ggagactacg acgacagcgc cttcatggag ccgaggtacc acgtccgtcg agaagatctg 420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg 480
ctcagggaca ctgacatgaa caagagggac aagcaaaaga ggactgotct acatttggcc 540
tctgccaatg gaaattcaga agtagtacia ctctgctgg acagacgatg tcaacttaac 600
gtccttgaca acaaaaaaag gacagctctg ataaaggccg tacaatgcca ggaagatgaa 660
tgtgtgttaa tgttgctgga acatggcgct gatggaaata ttcaagatga gtatggaaat 720
accgctctac actatgctat ctacaatgaa gataaattaa tggccaaagc actgctctta 780
tatggtgctg atattgaatc aaaaaacaag tgtggcctca caccactttt gcttggcgta 840
catgaacaaa aacagcaagt ggtgaaatct ttaatcaaga aaaaagctaa tttaaatgca 900
cttgatagat atggaagaac tgccctcata cttgctgtat gttgtggatc agcaagtata 960
gtcaatcttc tacttgagca aaatgttgat gtatcttctc aagatctatc tggacagacg 1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gtgaattact ttctgactat 1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga 1140
accagaaata aataa 1155

```

<210> 330

<211> 1155

<212> DNA

<213> Homo sapiens

<400> 330

```

atggtggctg aggtttgttc aatgcccact gcctctactg tgaagaagcc atttgatctc 60
aggagcaaga tgggcaagtg gtgccaccac cgcttccctt gctgcagggg gagcggcaag 120
agcaacatgg gcacttctgg agaccacgac gactccttta tgaagatgct caggagcaag 180
atgggcaagt gttgccacca ctgcttcccc tgctgcaggg ggagcggcac gagcaacgtg 240
ggcacttctg gagaccatga aaactccttt atgaagatgc tcaggagcaa gatgggcaag 300
tggtgctgtc actgcttccc ctgctgcagg gggagcggca agagcaacgt gggcgcttgg 360

```

```

ggagactacg accacagcgc cttcatggag ccgaggtacc acatccgtcg agaagatctg 420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgatcatg 480
ctcagggaca ctgacatgaa caagagggac aaggaaaaga ggactgctct acatttggcc 540
tctgccaatg gaaattcaga agtagtaca ctctgtctgg acagacgatg tcaacttaat 600
gtccttgaca acaaaaaaag gacagctctg ataaaggcca tacaatgcca ggaagatgaa 660
tgtgtgttaa tgttgctgga acatggcgct gatcgaaata ttccagatga gtatggaaat 720
accgctctac actatgctat ctacaatgaa gataaattaa tggccaaagc actgctctta 780
tatggtgctg atattgaatc aaaaaacaag tgtggcctca caccactttt gcttggcgta 840
catgaacaaa aacagcaagt ggtgaaatth ttaatcaaga aaaaagctaa tttaaatgta 900
cttgatagat atggaagaac tgccctcata cttgctgtat gttgtggatc agcaagtata 960
gtcaatcttc tacttgagca aaatgttgat gtatcttctc aagatctatc tggacagacg 1020
gccagagagt atgctgtttc tagtcatcat catgtaatth gtgaattact ttctgactat 1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga 1140
accagaaata aataa 1155

```

<210> 331

<211> 210

<212> PRT

<213> Homo sapiens

<400> 331

```

Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys
                5                10                15

```

```

Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn Ile Leu Asp Asn Lys Lys
                20                25                30

```

```

Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala
                35                40                45

```

```

Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr
                50                55                60

```

```

Gly Asn Thr Ala Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met
                65                70                75                80

```

```

Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys
                85                90                95

```

```

His Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln
                100                105                110

```

```

Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp
                115                120                125

```

```

Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala
                130                135                140

```

```

Ser Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln
                145                150                155                160

```

```

Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser Arg His
                165                170                175

```

Asn Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Ile Leu
180 185 190

Lys Val Ser Ser Glu Asn Ser Asn Pro Gly Asn Val Ser Arg Thr Arg
195 200 205

Asn Lys
210

<210> 332

<211> 384

<212> PRT

<213> Homo sapiens

<400> 332

Met Val Ala Glu Val Cys Ser Met Pro Thr Ala Ser Thr Val Lys Lys
5 10 15

Pro Phe Asp Leu Arg Ser Lys Met Gly Lys Trp Cys His His Arg Phe
20 25 30

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Met Gly Thr Ser Gly Asp
35 40 45

His Asp Asp Ser Phe Met Lys Met Leu Arg Ser Lys Met Gly Lys Cys
50 55 60

Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Thr Ser Asn Val
65 70 75 80

Gly Thr Ser Gly Asp His Glu Asn Ser Phe Met Lys Met Leu Arg Ser
85 90 95

Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
100 105 110

Gly Lys Ser Asn Val Gly Ala Trp Gly Asp Tyr Asp His Ser Ala Phe
115 120 125

Met Glu Pro Arg Tyr His Ile Arg Arg Glu Asp Leu Asp Lys Leu His
130 135 140

Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
145 150 155 160

Leu Arg Asp Thr Asp Met Asn Lys Arg Asp Lys Glu Lys Arg Thr Ala
165 170 175

Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Gln Leu Leu
180 185 190

Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
195 200 205

Ala Leu Ile Lys Ala Ile Gln Cys Gln Glu Asp Glu Cys Val Leu Met
210 215 220

Leu Leu Glu His Gly Ala Asp Arg Asn Ile Pro Asp Glu Tyr Gly Asn
225 230 235 240

Thr Ala Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
245 250 255

Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys Cys Gly
260 265 270

Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
275 280 285

Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Val Leu Asp Arg Tyr
290 295 300

Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
305 310 315 320

Val Asn Leu Leu Leu Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu
325 330 335

Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
340 345 350

Ile Cys Glu Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
355 360 365

Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
370 375 380

<210> 333

<211> 384

<212> PRT

<213> Homo sapiens

<400> 333

Met Val Ala Glu Val Cys Ser Met Pro Ala Ala Ser Ala Val Lys Lys
5 10 15

Pro Phe Asp Leu Arg Ser Lys Met Gly Lys Trp Cys His His Arg Phe
20 25 30

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Met Gly Thr Ser Gly Asp
35 40 45

His Asp Asp Ser Phe Met Lys Thr Leu Arg Ser Lys Met Gly Lys Cys
50 55 60

Cys His His Cys Phe Pro Cys Cys Arg Gly Ser Gly Thr Ser Asn Val

65					70						75				80
Gly	Thr	Ser	Gly	Asp	His	Asp	Asn	Ser	Phe	Met	Lys	Thr	Leu	Arg	Ser
				85					90					95	
Lys	Met	Gly	Lys	Trp	Cys	Cys	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser
			100					105					110		
Gly	Lys	Ser	Asn	Val	Gly	Thr	Trp	Gly	Asp	Tyr	Asp	Asp	Ser	Ala	Phe
		115					120					125			
Met	Glu	Pro	Arg	Tyr	His	Val	Arg	Arg	Glu	Asp	Leu	Asp	Lys	Leu	His
	130					135					140				
Arg	Ala	Ala	Trp	Trp	Gly	Lys	Val	Pro	Arg	Lys	Asp	Leu	Ile	Val	Met
145					150					155					160
Leu	Arg	Asp	Thr	Asp	Met	Asn	Lys	Arg	Asp	Lys	Gln	Lys	Arg	Thr	Ala
				165					170					175	
Leu	His	Leu	Ala	Ser	Ala	Asn	Gly	Asn	Ser	Glu	Val	Val	Gln	Leu	Leu
			180					185					190		
Leu	Asp	Arg	Arg	Cys	Gln	Leu	Asn	Val	Leu	Asp	Asn	Lys	Lys	Arg	Thr
		195					200					205			
Ala	Leu	Ile	Lys	Ala	Val	Gln	Cys	Gln	Glu	Asp	Glu	Cys	Val	Leu	Met
	210					215					220				
Leu	Leu	Glu	His	Gly	Ala	Asp	Gly	Asn	Ile	Gln	Asp	Glu	Tyr	Gly	Asn
225				230						235					240
Thr	Ala	Leu	His	Tyr	Ala	Ile	Tyr	Asn	Glu	Asp	Lys	Leu	Met	Ala	Lys
				245					250					255	
Ala	Leu	Leu	Leu	Tyr	Gly	Ala	Asp	Ile	Glu	Ser	Lys	Asn	Lys	Cys	Gly
			260					265					270		
Leu	Thr	Pro	Leu	Leu	Leu	Gly	Val	His	Glu	Gln	Lys	Gln	Gln	Val	Val
		275					280					285			
Lys	Phe	Leu	Ile	Lys	Lys	Lys	Ala	Asn	Leu	Asn	Ala	Leu	Asp	Arg	Tyr
	290					295					300				
Gly	Arg	Thr	Ala	Leu	Ile	Leu	Ala	Val	Cys	Cys	Gly	Ser	Ala	Ser	Ile
305					310					315					320
Val	Asn	Leu	Leu	Leu	Glu	Gln	Asn	Val	Asp	Val	Ser	Ser	Gln	Asp	Leu
				325					330					335	
Ser	Gly	Gln	Thr	Ala	Arg	Glu	Tyr	Ala	Val	Ser	Ser	His	His	His	Val
			340					345					350		
Ile	Cys	Glu	Leu	Leu	Ser	Asp	Tyr	Lys	Glu	Lys	Gln	Met	Leu	Lys	Ile

355					360					365					
Ser	Ser	Glu	Asn	Ser	Asn	Pro	Glu	Asn	Val	Ser	Arg	Thr	Arg	Asn	Lys
	370					375					380				
<210>		334													
<211>		384													
<212>		PRT													
<213>		Homo sapiens													
<400>		334													
Met	Val	Val	Glu	Val	Asp	Ser	Met	Pro	Ala	Ala	Ser	Ser	Val	Lys	Lys
				5					10					15	
Pro	Phe	Gly	Leu	Arg	Ser	Lys	Met	Gly	Lys	Trp	Cys	Cys	Arg	Cys	Phe
			20					25					30		
Pro	Cys	Cys	Arg	Glu	Ser	Gly	Lys	Ser	Asn	Val	Gly	Thr	Ser	Gly	Asp
		35					40					45			
His	Asp	Asp	Ser	Ala	Met	Lys	Thr	Leu	Arg	Ser	Lys	Met	Gly	Lys	Trp
	50					55					60				
Cys	Arg	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser	Gly	Lys	Ser	Asn	Val
	65				70					75					80
Gly	Ala	Ser	Gly	Asp	His	Asp	Asp	Ser	Ala	Met	Lys	Thr	Leu	Arg	Asn
				85					90					95	
Lys	Met	Gly	Lys	Trp	Cys	Cys	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser
			100					105					110		
Ser	Lys	Ser	Lys	Val	Gly	Ala	Trp	Gly	Asp	Tyr	Asp	Asp	Ser	Ala	Phe
		115					120					125			
Met	Glu	Pro	Arg	Tyr	His	Val	Arg	Gly	Glu	Asp	Leu	Asp	Lys	Leu	His
	130					135					140				
Arg	Ala	Ala	Trp	Trp	Gly	Lys	Val	Pro	Arg	Lys	Asp	Leu	Ile	Val	Met
	145				150					155					160
Leu	Arg	Asp	Thr	Asp	Val	Asn	Lys	Gln	Asp	Lys	Gln	Lys	Arg	Thr	Ala
				165					170					175	
Leu	His	Leu	Ala	Ser	Ala	Asn	Gly	Asn	Ser	Glu	Val	Val	Lys	Leu	Leu
			180					185					190		
Leu	Asp	Arg	Arg	Cys	Gln	Leu	Asn	Val	Leu	Asp	Asn	Lys	Lys	Arg	Thr
		195					200					205			
Ala	Leu	Ile	Lys	Ala	Val	Gln	Cys	Gln	Glu	Asp	Glu	Cys	Ala	Leu	Met
	210					215					220				

```

<210> 335
<211> 1185
<212> DNA
<213> Homo sapiens

<400> 335
atggttggttg aggttgatgc catgccggct gcctcttctg tgaagaagcc atttggtctc 60
aggagcaaga tgggcaagtg gtgctgccgt tgcttccoct gctgcaggga gagcggaag 120
agcaacgtgg gcacttctgg agaccacgac gactctgcta tgaagacact caggagcaag 180
atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg 240
ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag 300
tggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaagggt gggcgcttgg 360
ggagactacg atgacagtgc cttcatggag ccaggtacc acgtccgtgg agaagatctg 420
gacaagctcc acagagctgc ctggtggggg aaagtcccc aagaggatct catcgtcatg 480
ctcagggaca ctgacgtgaa caagaaggac aagcaaaaaga ggactgctct acatctggcc 540
tctgccaatg ggaattcaga agtagtaaaa ctctgctgg acagacgatg tcaacttaat 600
gtccttgaca acaaaaagag gacagctctg ataccaaata ttccagatga gtatggaaat 660
tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat 720
accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta 780
tatggtgctg atatcgaaat aaaaaacaag catggcctca caccactggt acttggtgta 840
catgagcaaa aacagcaagt cgtgaaat ttaatcaaga aaaaagcgaa tttaaatgca 900
ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata 960

```

```
<210> 336
<211> 394
<212> PRT
<213> Homo sapiens
```

<400>	336														
Met	Val	Val	Glu	Val	Asp	Ser	Met	Pro	Ala	Ala	Ser	Ser	Val	Lys	Lys
				5					10					15	
Pro	Phe	Gly	Leu	Arg	Ser	Lys	Met	Gly	Lys	Trp	Cys	Cys	Arg	Cys	Phe
			20					25					30		
Pro	Cys	Cys	Arg	Glu	Ser	Gly	Lys	Ser	Asn	Val	Gly	Thr	Ser	Gly	Asp
		35					40					45			
His	Asp	Asp	Ser	Ala	Met	Lys	Thr	Leu	Arg	Ser	Lys	Met	Gly	Lys	Trp
	50					55					60				
Cys	Arg	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser	Gly	Lys	Ser	Asn	Val
	65				70					75					80
Gly	Ala	Ser	Gly	Asp	His	Asp	Asp	Ser	Ala	Met	Lys	Thr	Leu	Arg	Asn
				85					90					95	
Lys	Met	Gly	Lys	Trp	Cys	Cys	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser
			100					105					110		
Gly	Lys	Ser	Lys	Val	Gly	Ala	Trp	Gly	Asp	Tyr	Asp	Asp	Ser	Ala	Phe
		115					120					125			
Met	Glu	Pro	Arg	Tyr	His	Val	Arg	Gly	Glu	Asp	Leu	Asp	Lys	Leu	His
	130					135					140				
Arg	Ala	Ala	Trp	Trp	Gly	Lys	Val	Pro	Arg	Lys	Asp	Leu	Ile	Val	Met
	145				150					155					160
Leu	Arg	Asp	Thr	Asp	Val	Asn	Lys	Lys	Asp	Lys	Gln	Lys	Arg	Thr	Ala
				165					170					175	
Leu	His	Leu	Ala	Ser	Ala	Asn	Gly	Asn	Ser	Glu	Val	Val	Lys	Leu	Leu
			180					185					190		
Leu	Asp	Arg	Arg	Cys	Gln	Leu	Asn	Val	Leu	Asp	Asn	Lys	Lys	Arg	Thr
		195					200					205			
Ala	Leu	Ile	Lys	Ala	Val	Gln	Cys	Gln	Glu	Asp	Glu	Cys	Ala	Leu	Met
	210					215					220				
Leu	Leu	Glu	His	Gly	Thr	Asp	Pro	Asn	Ile	Pro	Asp	Glu	Tyr	Gly	Asn

225 230 235 240
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
 245 250 255
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 260 265 270
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
 275 280 285
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
 290 295 300
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
 305 310 315 320
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
 325 330 335
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
 340 345 350
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
 355 360 365
 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
 370 375 380
 His His His His His His His His His His
 385 390

<210> 337
 <211> 34
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 337
 cggcggatcc accatggtgg ttgaggttga ttcc

34

<210> 338
 <211> 74
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

cggcctctaga ttaatggtga tggatgatgat gatggtgatg atgtttattt ctgggttcttg 60
agacattttc tggg 74

<213> Homo sapiens

atggtggctg	aggtctggttc	aatgccggct	gcctcctctg	tgaagaagcc	atttgggtctc	60
agaagcaatg	tgggcaagtg	gtgccgccac	tgtctccctt	ggtgcagggg	gagcggcaag	120
agcaacgtgg	gcacttcttg	agaccacgac	gattctgcta	tgaagacact	caggagcaag	180
atgggcaagt	ggtgccgcca	ctgcttcccc	tggcgcaggg	ggagcagcaa	gagcaacgtg	240
ggcacttctg	gagaccacga	cgactctgct	atgaagacac	tcaggagcaa	gatgggcaag	300
tggcgtctgc	actgcttccc	ctgctgcagg	gggagcggca	agagcaaagt	gggcccttgg	360
ggagactacg	acgacagcgc	tttcatggag	ccgaggtacc	acgtccgtcg	agaagatctg	420
gacaagctcc	acagagctgc	ctggcggggg	aaagtcccca	gaaaggatct	catcgtcctg	480
ctcaaggaca	ctgacatgaa	caagaaggac	aagcaaaaga	ggactgctct	acatctggcc	540
tctgccaatg	gaaattcaga	agtagtaaaa	ctcctgctgg	acagacgatg	tcaacttaat	600
atccttgaca	acaaaaagag	gacagctctg	acaaaggccg	tacaatgccg	ggaagatgaa	660
tgtgcgttaa	tgttgctgga	acatggcact	gatccgaata	ttccagatga	gtatggaaat	720
accgctctac	actatgctat	ctacaatgaa	gataaattaa	tggccaaagc	actgctctta	780
tacggcgtctg	atatcgaatc	aaaaaacaag	catggcctca	caccactggt	acttgggtgta	840
catgagcaaa	aacagcaagt	ggtgaaattc	ttaatcaaga	aaaaagcaaa	tttaaattgca	900
ctggatagat	atggaagaac	tgctctcata	cttgctgtat	gttgtggatc	ggcaagtata	960
gtcagccttc	tacttgagca	aaacattgat	gtatcttctc	aagatctatc	tggacagacg	1020
gccagagagt	atgctgtttc	tagtcattcat	aatgtaattt	gccagttact	ttctgactac	1080
aaagaaaaac	agatgctaaa	agtctcttct	gaaaaacaga	atccaggaaa	tgtctcaaga	1140
accagaaata	aataagggtg	gtgata				1166

<213> Homo sapiens

Met Val Ala Glu Ala Gly Ser Met Pro Ala Ala Ser Ser Val Lys Lys
5 10 15

Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe
20 25 30

Pro Trp Cys Arg Gly Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
35 40 45

His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
50 55 60

Cys Arg His Cys Phe Pro Trp Cys Arg Gly Ser Ser Lys Ser Asn Val
65 70 75 80

Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser

			85					90					95		
Lys	Met	Gly	Lys	Trp	Cys	Cys	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser
			100				105						110		
Gly	Lys	Ser	Lys	Val	Gly	Pro	Trp	Gly	Asp	Tyr	Asp	Asp	Ser	Ala	Phe
			115				120				125				
Met	Glu	Pro	Arg	Tyr	His	Val	Arg	Arg	Glu	Asp	Leu	Asp	Lys	Leu	His
			130				135				140				
Arg	Ala	Ala	Trp	Trp	Gly	Lys	Val	Pro	Arg	Lys	Asp	Leu	Ile	Val	Met
145				150						155			160		
Leu	Lys	Asp	Thr	Asp	Met	Asn	Lys	Lys	Asp	Lys	Gln	Lys	Arg	Thr	Ala
			165						170			175			
Leu	His	Leu	Ala	Ser	Ala	Asn	Gly	Asn	Ser	Glu	Val	Val	Lys	Leu	Leu
			180				185						190		
Leu	Asp	Arg	Arg	Cys	Gln	Leu	Asn	Ile	Leu	Asp	Asn	Lys	Lys	Arg	Thr
			195				200				205				
Ala	Leu	Thr	Lys	Ala	Val	Gln	Cys	Arg	Glu	Asp	Glu	Cys	Ala	Leu	Met
			210				215				220				
Leu	Leu	Glu	His	Gly	Thr	Asp	Pro	Asn	Ile	Pro	Asp	Glu	Tyr	Gly	Asn
225				230						235			240		
Thr	Ala	Leu	His	Tyr	Ala	Ile	Tyr	Asn	Glu	Asp	Lys	Leu	Met	Ala	Lys
			245						250			255			
Ala	Leu	Leu	Leu	Tyr	Gly	Ala	Asp	Ile	Glu	Ser	Lys	Asn	Lys	His	Gly
			260						265			270			
Leu	Thr	Pro	Leu	Leu	Leu	Gly	Val	His	Glu	Gln	Lys	Gln	Gln	Val	Val
			275				280						285		
Lys	Phe	Leu	Ile	Lys	Lys	Lys	Ala	Asn	Leu	Asn	Ala	Leu	Asp	Arg	Tyr
			290				295				300				
Gly	Arg	Thr	Ala	Leu	Ile	Leu	Ala	Val	Cys	Cys	Gly	Ser	Ala	Ser	Ile
305				310						315			320		
Val	Ser	Leu	Leu	Leu	Glu	Gln	Asn	Ile	Asp	Val	Ser	Ser	Gln	Asp	Leu
			325						330			335			
Ser	Gly	Gln	Thr	Ala	Arg	Glu	Tyr	Ala	Val	Ser	Ser	His	His	Asn	Val
			340						345			350			
Ile	Cys	Gln	Leu	Leu	Ser	Asp	Tyr	Lys	Glu	Lys	Gln	Met	Leu	Lys	Val
			355						360			365			
Ser	Ser	Glu	Asn	Ser	Asn	Pro	Gly	Asn	Val	Ser	Arg	Thr	Arg	Asn	Lys

370

375

380

<210> 341
 <211> 876
 <212> DNA
 <213> Homo sapiens

<400> 341
 atgcatcttt catttcctgc atttcttcct ccctggatgg acagggggag cggcaagagc 60
 aacgtgggca cttctggaga ccacaacgac tcctctgtga agacgcttgg gagcaagagg 120
 tgcaagtggg gctgccactg cttcccttgc tgcaggggga gcggcaagag caacgtgggc 180
 gcttggggag actacgatga cagcgcttc atggatccca ggtaccacgt ccatggagaa 240
 gatctggaca agctccacag agctgcctgg tggggtaaag tccccagaaa ggatctcatc 300
 gtcattgtca gggacacgga tgtgaacaag agggacaagc aaaagaggac tgctctacat 360
 ctggcctctg ccaatgggaa ttcagaagta gtaaaactcg tgctggacag acgatgtcaa 420
 cttaatgtcc ttgacaacaa aaagaggaca gctctgacaa aggccgtaca atgccaggaa 480
 gatgaatgtg cgtaaatgtt gctggaacat ggcactgatc caaatattcc agatgagtat 540
 ggaaatacca ctctacacta tgctgtctac aatgaagata aattaatggc caaagcactg 600
 ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
 ggtatacatg agcaaaaaca gcaagtgggtg aaatttttaa tcaagaaaaa agcgaattta 720
 aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
 agtatagtca gccctctact tgagcaaaat gttgatgtat cttctcaaga tctggaaaga 840
 cggccagaga gtatgctgtt tctagtcac atcatg 876

<210> 342
 <211> 876
 <212> DNA
 <213> Homo sapiens

<400> 342
 atgcatcttt catttcctgc atttcttcct ccctggatgg acagggggag cggcaagagc 60
 aacgtgggca cttctggaga ccacaacgac tcctctgtga agacgcttgg gagcaagagg 120
 tgcaagtggg gctgccactg cttcccttgc tgcaggggga gcggcaagag caacgtgggc 180
 gcttggggag actacgatga cagcgcttc atggatccca ggtaccacgt ccatggagaa 240
 gatctggaca agctccacag agctgcctgg tggggtaaag tccccagaaa ggatctcatc 300
 gtcattgtca gggacactga tgtgaacaag agggacaagc aaaagaggac tgctctacat 360
 ctggcctctg ccaatgggaa ttcagaagta gtaaaactcg tgctggacag acgatgtcaa 420
 cttaatgtcc ttgacaacaa aaagaggaca gctctgacaa aggccgtaca atgccaggaa 480
 gatgaatgtg cgtaaatgtt gctggaacat ggcactgatc caaatattcc agatgagtat 540
 ggaaatacca ctctacacta tgctgtctac aatgaagata aattaatggc caaagcactg 600
 ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
 ggtatacatg agcaaaaaca gcaagtgggtg aaatttttaa tcaagaaaaa agcgaattta 720
 aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
 agtatagtca gccctctact tgagcaaaat gttgatgtat cttctcaaga tctggaaaga 840
 cggccagaga gtatgctgtt tctagtcac atcatg 876

<210> 343
 <211> 933
 <212> DNA
 <213> Homo sapiens

<400> 343
 atggtggttg aggttgattc aatgccggt gcctcttctg tgaagaagcc atttgggtctc 60

```

aggagcaaga tgggcaagtg gtgctgcttt ccctgctgca gggggagcgg caagagcaac 120
gtgggcactt ctggagacca caacgactcc tctgtgaaga cgcttgggag caagaggtgc 180
aagtgggtgt gccactgctt cccctgctgc agggggagcg gcaagagcaa cgtgggcgct 240
tggggagact acgatgacag cgccttcatg gatcccaggt accacgtcca tggagaagat 300
ctggacaagc tccacagagc tgcttgggtg ggtaaagtcc ccagaaagga tctcatcgtc 360
atgctcaggg aactgatgt gaacaagagg gacaagcaaa agaggactgc tctacatctg 420
gcctctgcc aatgggaattc agaagtagta aaactcgtgc tggacagacg atgtcaactt 480
aatgtccttg acaacaaaaa gaggacagct ctgacaaaagg ccgtacaatg ccaggaagat 540
gaatgtgcgt taatgttgct ggaacatggc actgatccaa atattccaga tgagtatgga 600
aataccactc tacactatgc tgtctacaat gaagataaat taatggccaa agcactgctc 660
ttatacgggt ctgatatcga atcaaaaaac aagcatggcc tcacaccact gctacttggg 720
atacatgagc aaaaacagca agtgggtgaaa tttttaatca agaaaaagc gaattttaat 780
gcgctggata gatatggaag aactgctctc atacttgctg tatgttggtg atcagcaagt 840
atagtcagcc ctctacttga gcaaaatgtt gatgtatctt ctcaagatct ggaaagacgg 900
ccagagagta tgctgtttct agtcatcatc atg 933

```

<210> 344

<211> 939

<212> DNA

<213> Homo sapiens

<400> 344

```

atggtggttg aggttgattc aatgccggt gcctcttctg tgaagaagcc atttggtctc 60
aggagcaaga tgggcaagtg gtgctgccac tgctttccct gctgcagggg gagcggcaag 120
agcaacgtgg gcacttctgg agaccacaac gactcctctg tgaagacgct tgggagcaag 180
aggtgcaagt ggtgctgcca ctgcttcccc tgctgcaggg ggagcggcaa gagcaacgtg 240
gtcgttggg gagactacga tgacagcgcc ttcattggatc ccaggtacca cgtccatgga 300
gaagatctgg acaagctcca cagagctgcc tggtggggta aagtccccag aaaggatctc 360
atcgtcatgc tcagggacac ggatgtgaac aagagggaca agcaaaagag gactgctcta 420
catctggcct ctgccaatgg gaattcagaa gtagtaaaac tctgtctgga cagacgatgt 480
caacttaatg tccttgacaa caaaaagagg acagctctga caaaggccgt acaatgccag 540
gaagatgaat gtgcgttaat gttgctggaa catggcactg atccaaatat tccagatgag 600
tatggaaata ccactctaca ctatgctgtc tacaatgaag ataaattaat ggccaaagca 660
ctgctcttat acggtgctga tatcgaatca aaaaacaagc atggcctcac accactgcta 720
cttgggtatac atgagcaaaa acagcaagtg gtgaaatttt taatcaagaa aaaagcgaat 780
ttaaatgcgc tggatagata tggagaact gctctcatac ttgctgtatg ttgtggatca 840
gcaagtatag tcagccctct acttgagcaa aatgttgatg tatcttctca agatctggaa 900
agacggccag agagtatgct gtttctagtc atcatcatg 939

```

<210> 345

<211> 292

<212> PRT

<213> Homo sapiens

<400> 345

```

Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
      5              10              15

Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
      20              25              30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe
      35              40              45

```

Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Val Ala Trp Gly Asp
 50 55 60
 Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr His Val His Gly Glu
 65 70 75 80
 Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg
 85 90 95
 Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp Val Asn Lys Arg Asp
 100 105 110
 Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser
 115 120 125
 Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys Gln Leu Asn Val Leu
 130 135 140
 Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu
 145 150 155 160
 Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile
 165 170 175
 Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Val Tyr Asn Glu
 180 185 190
 Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu
 195 200 205
 Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Ile His Glu
 210 215 220
 Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu
 225 230 235 240
 Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys
 245 250 255
 Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu Glu Gln Asn Val Asp
 260 265 270
 Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu Ser Met Leu Phe Leu
 275 280 285
 Val Ile Ile Met
 290

<210> 346

<211> 292

<212> PRT

<213> Homo sapiens


```
<210> 347
<211> 311
<212> PRT
<213> Homo sapiens
```

<400>	347														
Met	Val	Val	Glu	Val	Asp	Ser	Met	Pro	Ala	Ala	Ser	Ser	Val	Lys	Lys
				5					10					15	
Pro	Phe	Gly	Leu	Arg	Ser	Lys	Met	Gly	Lys	Trp	Cys	Cys	Phe	Pro	Cys
			20					25					30		
Cys	Arg	Gly	Ser	Gly	Lys	Ser	Asn	Val	Gly	Thr	Ser	Gly	Asp	His	Asn
		35					40					45			
Asp	Ser	Ser	Val	Lys	Thr	Leu	Gly	Ser	Lys	Arg	Cys	Lys	Trp	Cys	Cys
	50					55					60				
His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser	Gly	Lys	Ser	Asn	Val	Gly	Ala
65					70					75					80
Trp	Gly	Asp	Tyr	Asp	Asp	Ser	Ala	Phe	Met	Asp	Pro	Arg	Tyr	His	Val
				85					90					95	
His	Gly	Glu	Asp	Leu	Asp	Lys	Leu	His	Arg	Ala	Ala	Trp	Trp	Gly	Lys
			100					105					110		
Val	Pro	Arg	Lys	Asp	Leu	Ile	Val	Met	Leu	Arg	Asp	Thr	Asp	Val	Asn
		115					120					125			
Lys	Arg	Asp	Lys	Gln	Lys	Arg	Thr	Ala	Leu	His	Leu	Ala	Ser	Ala	Asn
	130					135					140				
Gly	Asn	Ser	Glu	Val	Val	Lys	Leu	Val	Leu	Asp	Arg	Arg	Cys	Gln	Leu
145					150					155					160
Asn	Val	Leu	Asp	Asn	Lys	Lys	Arg	Thr	Ala	Leu	Thr	Lys	Ala	Val	Gln
				165					170					175	
Cys	Gln	Glu	Asp	Glu	Cys	Ala	Leu	Met	Leu	Leu	Glu	His	Gly	Thr	Asp
			180					185					190		
Pro	Asn	Ile	Pro	Asp	Glu	Tyr	Gly	Asn	Thr	Thr	Leu	His	Tyr	Ala	Val
		195					200					205			
Tyr	Asn	Glu	Asp	Lys	Leu	Met	Ala	Lys	Ala	Leu	Leu	Leu	Tyr	Gly	Ala
	210					215					220				
Asp	Ile	Glu	Ser	Lys	Asn	Lys	His	Gly	Leu	Thr	Pro	Leu	Leu	Leu	Gly

225 230 235 240
 Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys
 245 250 255
 Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu
 260 265 270
 Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu Glu Gln
 275 280 285
 Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu Ser Met
 290 295 300
 Leu Phe Leu Val Ile Ile Met
 305 310

<210> 348
 <211> 313
 <212> PRT
 <213> Homo sapiens

<400> 348
 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 5 10 15
 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys His Cys Phe
 20 25 30
 Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
 35 40 45
 His Asn Asp Ser Ser Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp
 50 55 60
 Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
 65 70 75 80
 Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr
 85 90 95
 His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp
 100 105 110
 Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp
 115 120 125
 Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
 130 135 140
 Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys
 145 150 155 160

Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala
165 170 175

Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly
180 185 190

Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr
195 200 205

Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr
210 215 220

Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
225 230 235 240

Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys
245 250 255

Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu
260 265 270

Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu
275 280 285

Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu
290 295 300

Ser Met Leu Phe Leu Val Ile Ile Met
305 310

<210> 349

<211> 30

<212> PRT

<213> Homo sapiens

<400> 349

Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
1 5 10 15

Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu Leu Asp Arg
20 25 30

<210> 350

<211> 30

<212> PRT

<213> Homo sapiens

<400> 350

Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu
1 5 10 15

Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys
20 25 30

<210> 351
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 351
 Gly Ser Ala Ser Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val
 1 5 10 15
 Ser Ser Gln Asp Leu Ser Gly Gln Thr
 20 25

<210> 352
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 352
 Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys Pro
 1 5 10 15
 Phe Gly Leu Arg
 20

<210> 353
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 353
 Ser Met Pro Ala Ala Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser
 1 5 10 15
 Lys Met Gly Lys
 20

<210> 354
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 354
 Ser Ser Val Lys Lys Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp
 1 5 10 15
 Cys Cys Arg Cys
 20

<210> 355
 <211> 20
 <212> PRT
 <213> Homo sapiens

bioRxiv preprint doi: <https://doi.org/10.1101/000000>; this version posted January 1, 2015. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
1 5 10 15
Pro Cys Cys Arg
20

<213> Homo sapiens

Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu
 1 5 10 15
 Ser Gly Lys Ser
 20

<213> Homo sapiens

Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn
1 5 10 15
Val Gly Thr Ser
20

<213> Homo sapiens

Phe Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly
 1 5 10 15
 Asp His Asp Asp
 20

<213> Homo sapiens

100 355
Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser
1 5 10 15
Ala Met Lys Thr
20

```
<400> 360
Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu
 1          5          10          15
Arg Ser Lys Met
 20
```

<400> 361
Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly
1 5 10 15
Lys Trp Cys Arg
20

```
<400> 362
Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His
  1             5             10             15
Cys Phe Pro Cys
      20
```

```

<400> 363
Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys
 1          5          10          15
Arg Gly Ser Gly
      20

```

```
<210> 364
<211> 20
<212> PRT
<213> Homo sapiens
```

<400> 364

Gly Lys Trp Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys
 1 5 10 15
 Ser Asn Val Gly
 20

<210> 365

<211> 20

<212> PRT

<213> Homo sapiens

<400> 365

His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val Gly Ala
 1 5 10 15
 Ser Gly Asp His
 20

<210> 366

<211> 20

<212> PRT

<213> Homo sapiens

<400> 366

Cys Arg Gly Ser Gly Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp
 1 5 10 15
 Asp Ser Ala Met
 20

<210> 367

<211> 20

<212> PRT

<213> Homo sapiens

<400> 367

Lys Ser Asn Val Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys
 1 5 10 15
 Thr Leu Arg Asn
 20

<210> 368

<211> 20

<212> PRT

<213> Homo sapiens

<400> 368

Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn Lys
 1 5 10 15
 Met Gly Lys Trp
 20

1007947.020000

<210> 369
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 369
 Asp Asp Ser Ala Met Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys
 1 5 10 15
 Cys His Cys Phe
 20

<210> 370
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 370
 Lys Thr Leu Arg Asn Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro
 1 5 10 15
 Cys Cys Arg Gly
 20

<210> 371
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 371
 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
 1 5 10 15
 Gly Lys Ser Lys
 20

<210> 372
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 372
 Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Lys Val
 1 5 10 15
 Gly Ala Trp Gly
 20

<210> 373
 <211> 20
 <212> PRT
 <213> Homo sapiens

Ala Phe Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys
1 5 10 15
Leu His Arg Ala
20

```
<400> 378
Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala
 1           5          10          15
Trp Trp Gly Lys
      20
```

```
<400> 379
Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val
 1          5          10          15
Pro Arg Lys Asp
 20
```

```
<400> 380
Lys Leu His Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu
 1          5          10          15
Ile Val Met Leu
      20
```

```
<400> 381
Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg
  1             5             10             15
Asp Thr Asp Val
           20
```

```
<210> 382
<211> 20
<212> PRT
<213> Homo sapiens
```

<400> 382

Val	Pro	Arg	Lys	Asp	Leu	Ile	Val	Met	Leu	Arg	Asp	Thr	Asp	Val	Asn
1				5					10					15	
Lys	Lys	Asp	Lys												
			20												

<210> 383

<211> 20

<212> PRT

<213> Homo sapiens

<400> 383

Leu	Ile	Val	Met	Leu	Arg	Asp	Thr	Asp	Val	Asn	Lys	Lys	Asp	Lys	Gln
1				5					10					15	
Lys	Arg	Thr	Ala												
			20												

<210> 384

<211> 20

<212> PRT

<213> Homo sapiens

<400> 384

Arg	Asp	Thr	Asp	Val	Asn	Lys	Lys	Asp	Lys	Gln	Lys	Arg	Thr	Ala	Leu
1				5					10					15	
His	Leu	Ala	Ser												
			20												

<210> 385

<211> 20

<212> PRT

<213> Homo sapiens

<400> 385

Asn	Lys	Lys	Asp	Lys	Gln	Lys	Arg	Thr	Ala	Leu	His	Leu	Ala	Ser	Ala
1				5					10					15	
Asn	Gly	Asn	Ser												
			20												

<210> 386

<211> 20

<212> PRT

<213> Homo sapiens

<400> 386

Gln	Lys	Arg	Thr	Ala	Leu	His	Leu	Ala	Ser	Ala	Asn	Gly	Asn	Ser	Glu
1				5					10					15	
Val	Val	Lys	Leu												
			20												

200220 26164004

<400> 387
Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
1 5 10 15
Leu Asp Arg Arg
20

```
<400> 388
Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu Leu Asp Arg Arg Cys
  1              5              10              15
Gln Leu Asn Val
          20
```

```
<400> 389
Glu Val Val Lys Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu
  1           5           10           15
Asp Asn Lys Lys
      20
```

```
<400> 390
Leu Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg
 1          5          10          15
Thr Ala Leu Ile
      20
```

```
<210> 391
<211> 20
<212> PRT
<213> Homo sapiens
```

<400> 391

Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Ile Lys
 1 5 10 15
 Ala Val Gln Cys
 20

<210> 392

<211> 20

<212> PRT

<213> Homo sapiens

<400> 392

Leu Asp Asn Lys Lys Arg Thr Ala Leu Ile Lys Ala Val Gln Cys Gln
 1 5 10 15
 Glu Asp Glu Cys
 20

<210> 393

<211> 20

<212> PRT

<213> Homo sapiens

<400> 393

Arg Thr Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala
 1 5 10 15
 Leu Met Leu Leu
 20

<210> 394

<211> 20

<212> PRT

<213> Homo sapiens

<400> 394

Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu
 1 5 10 15
 His Gly Thr Asp
 20

<210> 395

<211> 20

<212> PRT

<213> Homo sapiens

<400> 395

Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro
 1 5 10 15
 Asn Ile Pro Asp
 20

10094762001

<210> 396
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 396
 Ala Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu
 1 5 10 15
 Tyr Gly Asn Thr
 20

<210> 397
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 397
 Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr
 1 5 10 15
 Leu His Tyr Ala
 20

<210> 398
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 398
 Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile
 1 5 10 15
 Tyr Asn Glu Asp
 20

<210> 399
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 399
 Glu Tyr Gly Asn Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys
 1 5 10 15
 Leu Met Ala Lys
 20

<210> 400
 <211> 20
 <212> PRT
 <213> Homo sapiens

100913-000000

```
<400> 400
Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala
 1              5              10              15
Leu Leu Leu Tyr
      20
```

<211> 20

<212> PRT

<213> Homo sapiens

```

<400> 401
Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly
 1                               10                      15
Ala Asp Ile Glu
                20

```

<210> 402

<211> 20

<212> PRT

<213> Homo sapiens

<400> 402

Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser
1 5 10 15
Lys Asn Lys His
20

<210> 403

<211> 20

<212> PRT

<213> Homo sapiens

<400> 403

Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
1 5 10 15
Leu Thr Pro Leu
20

<210> 404

<211> 20

<212> PRT

<213> Homo sapiens

<400> 404

Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
1 5 10 15
Leu Gly Val His
20

<210> 405
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 405
 Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu
 1 5 10 15
 Gln Lys Gln Gln
 20

<210> 406
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 406
 Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val
 1 5 10 15
 Val Lys Phe Leu
 20

<210> 407
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 407
 Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile
 1 5 10 15
 Lys Lys Lys Ala
 20

<210> 408
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 408
 Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn
 1 5 10 15
 Leu Asn Ala Leu
 20

<210> 409
 <211> 20
 <212> PRT
 <213> Homo sapiens

200220 "CE" 001

<400> 409

Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp
 1 5 10 15
 Arg Tyr Gly Arg
 20

<210> 410

<211> 20

<212> PRT

<213> Homo sapiens

<400> 410

Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Thr Arg
 1 5 10 15
 Ala Leu Ile Leu
 20

<210> 411

<211> 20

<212> PRT

<213> Homo sapiens

<400> 411

Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala
 1 5 10 15
 Val Cys Cys Gly
 20

<210> 412

<211> 20

<212> PRT

<213> Homo sapiens

<400> 412

Asp Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser
 1 5 10 15
 Ala Ser Ile Val
 20

<210> 413

<211> 20

<212> PRT

<213> Homo sapiens

<400> 413

Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser
 1 5 10 15
 Leu Leu Leu Glu
 20

10043-02402

```
<210> 418
<211> 20
<212> PRT
<213> Homo sapiens
```

Ser Ser Gln Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser
1 5 10 15
Ser His His His
20

```

<400> 419
Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
 1          5          10          15
Ile Cys Gln Leu
      20

```

```
<400> 420
Arg Glu Tyr Ala Val Ser Ser His His His Val Ile Cys Gln Leu Leu
 1          5          10          15
Ser Asp Tyr Lys
      20
```

```
<400> 421
Ser Ser His His His Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu
 1                    5          10          15
Lys Gln Met Leu
          20
```

```
<400> 422
Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys
 1             5             10             15
Ile Ser Ser Glu
          20
```

<210> 423
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 423
 Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile Ser Ser Glu Asn
 1 5 10 15
 Ser Asn Pro Glu
 20

<210> 424
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 424
 Glu Lys Gln Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu Asn
 1 5 10 15
 Val Ser Arg Thr
 20

<210> 425
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 425
 Met Leu Lys Ile Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg
 1 5 10 15
 Thr Arg Asn Lys
 20

<210> 426
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 426
 Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe Pro Cys Cys Arg Glu
 1 5 10 15
 Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asp Asp Ser Ala
 20 25 30
 Met

<210> 427
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 427

Ser	Lys	Met	Gly	Lys	Trp	Cys	Arg	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly
1				5					10					15	
Ser	Gly	Lys	Ser	Asn	Val	Gly	Ala	Ser	Gly	Asp	His	Asp	Asp	Ser	Ala
			20					25					30		

Met

<210> 428

<211> 33

<212> PRT

<213> Homo sapiens

<400> 428

Asn	Lys	Met	Gly	Lys	Trp	Cys	Cys	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly
1				5					10					15	
Ser	Gly	Lys	Ser	Lys	Val	Gly	Ala	Trp	Gly	Asp	Tyr	Asp	Asp	Ser	Ala
			20					25					30		

Phe

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525
 526
 527
 528
 529
 530
 531
 532
 533
 534
 535
 536
 537
 538
 539
 540
 541
 542
 543
 544
 545
 546
 547
 548
 549
 550
 551
 552
 553
 554
 555
 556
 557
 558
 559
 560
 561
 562
 563
 564
 565
 566
 567
 568
 569
 570
 571
 572
 573
 574
 575
 576
 577
 578
 579
 580
 581
 582
 583
 584
 585
 586
 587
 588
 589
 590
 591
 592
 593
 594
 595
 596
 597
 598
 599
 600
 601
 602
 603
 604
 605
 606
 607
 608
 609
 610
 611
 612
 613
 614
 615
 616
 617
 618
 619
 620
 621
 622
 623
 624
 625
 626
 627
 628
 629
 630
 631
 632
 633
 634
 635
 636
 637
 638
 639
 640
 641
 642
 643
 644
 645
 646
 647
 648
 649
 650
 651
 652
 653
 654
 655
 656
 657
 658
 659
 660
 661
 662
 663
 664
 665
 666
 667
 668
 669
 670
 671
 672
 673
 674
 675
 676
 677
 678
 679
 680
 681
 682
 683
 684
 685
 686
 687
 688
 689
 690
 691
 692
 693
 694
 695
 696
 697
 698
 699
 700
 701
 702
 703
 704
 705
 706
 707
 708
 709
 710
 711
 712
 713
 714
 715
 716
 717
 718
 719
 720
 721
 722
 723
 724
 725
 726
 727
 728
 729
 730
 731
 732
 733
 734
 735
 736
 737
 738
 739
 740
 741
 742
 743
 744
 745
 746
 747
 748
 749
 750
 751
 752
 753
 754
 755
 756
 757
 758
 759
 760
 761
 762
 763
 764
 765
 766
 767
 768
 769
 770
 771
 772
 773
 774
 775
 776
 777
 778
 779
 780
 781
 782
 783
 784
 785
 786
 787
 788
 789
 790
 791
 792
 793
 794
 795
 796
 797
 798
 799
 800
 801
 802
 803
 804
 805
 806
 807
 808
 809
 810
 811
 812
 813
 814
 815
 816
 817
 818
 819
 820
 821
 822
 823
 824
 825
 826
 827
 828
 829
 830
 831
 832
 833
 834
 835
 836
 837
 838
 839
 840
 841
 842
 843
 844
 845
 846
 847
 848
 849
 850
 851
 852
 853
 854
 855
 856
 857
 858
 859
 860
 861
 862
 863
 864
 865
 866
 867
 868
 869
 870
 871
 872
 873
 874
 875
 876
 877
 878
 879
 880
 881
 882
 883
 884
 885
 886
 887
 888
 889
 890
 891
 892
 893
 894
 895
 896
 897
 898
 899
 900
 901
 902
 903
 904
 905
 906
 907
 908
 909
 910
 911
 912
 913
 914
 915
 916
 917
 918
 919
 920
 921
 922
 923
 924
 925
 926
 927
 928
 929
 930
 931
 932
 933
 934
 935
 936
 937
 938
 939
 940
 941
 942
 943
 944
 945
 946
 947
 948
 949
 950
 951
 952
 953
 954
 955
 956
 957
 958
 959
 960
 961
 962
 963
 964
 965
 966
 967
 968
 969
 970
 971
 972
 973
 974
 975
 976
 977
 978
 979
 980
 981
 982
 983
 984
 985
 986
 987
 988
 989
 990
 991
 992
 993
 994
 995
 996
 997
 998
 999
 1000
 1001
 1002
 1003
 1004
 1005
 1006
 1007
 1008
 1009
 1010
 1011
 1012
 1013
 1014
 1015
 1016
 1017
 1018
 1019
 1020
 1021
 1022
 1023
 1024
 1025
 1026
 1027
 1028
 1029
 1030
 1031
 1032
 1033
 1034
 1035
 1036
 1037
 1038
 1039
 1040
 1041
 1042
 1043
 1044
 1045
 1046
 1047
 1048
 1049
 1050
 1051
 1052
 1053
 1054
 1055
 1056
 1057
 1058
 1059
 1060
 1061
 1062
 1063
 1064
 1065
 1066
 1067
 1068
 1069
 1070
 1071
 1072
 1073
 1074
 1075
 1076
 1077
 1078
 1079
 1080
 1081
 1082
 1083
 1084
 1085
 1086
 1087
 1088
 1089
 1090
 1091
 1092
 1093
 1094
 1095
 1096
 1097
 1098
 1099
 1100
 1101
 1102
 1103
 1104
 1105
 1106
 1107
 1108
 1109
 1110
 1111
 1112
 1113
 1114
 1115
 1116
 1117
 1118
 1119
 1120
 1121
 1122
 1123
 1124
 1125
 1126
 1127
 1128
 1129
 1130
 1131
 1132
 1133
 1134
 1135
 1136
 1137
 1138
 1139
 1140
 1141
 1142
 1143
 1144
 1145
 1146
 1147
 1148
 1149
 1150
 1151
 1152
 1153
 1154
 1155
 1156
 1157
 1158
 1159
 1160
 1161
 1162
 1163
 1164
 1165
 1166
 1167
 1168
 1169
 1170
 1171
 1172
 1173
 1174
 1175
 1176
 1177
 1178
 1179
 1180
 1181
 1182
 1183
 1184
 1185
 1186
 1187
 1188
 1189
 1190
 1191
 1192
 1193
 1194
 1195
 1196
 1197
 1198
 1199
 1200
 1201
 1202
 1203
 1204
 1205
 1206
 1207
 1208
 1209
 1210
 1211
 1212
 1213
 1214
 1215
 1216
 1217
 1218
 1219
 1220
 1221
 1222
 1223
 1224
 1225
 1226
 1227
 1228
 1229
 1230
 1231
 1232
 1233
 1234
 1235
 1236
 1237
 1238
 1239
 1240
 1241
 1242
 1243
 1244
 1245
 1246
 1247
 1248
 1249
 1250
 1251
 1252
 1253
 1254
 1255
 1256
 1257
 1258
 1259
 1260
 1261
 1262
 1263
 1264
 1265
 1266
 1267
 1268
 1269
 1270
 1271
 1272
 1273
 1274
 1275
 1276
 1277
 1278
 1279
 1280
 1281
 1282
 1283
 1284
 1285
 1286
 1287
 1288
 1289
 1290
 1291
 1292
 1293
 1294
 1295
 1296
 1297
 1298
 1299
 1300
 1301
 1302
 1303
 1304
 1305
 1306
 1307
 1308
 1309
 1310
 1311
 1312
 1313
 1314
 1315
 1316
 1317
 1318
 1319
 1320
 1321
 1322
 1323
 1324
 1325
 1326
 1327
 1328
 1329
 1330
 1331
 1332
 1333
 1334
 1335
 1336
 1337
 1338
 1339
 1340
 1341
 1342
 1343
 1344
 1345
 1346
 1347
 1348
 1349
 1350
 1351
 1352
 1353
 1354
 1355
 1356
 1357
 1358
 1359
 1360
 1361
 1362
 1363
 1364
 1365
 1366
 1367
 1368
 1369
 1370
 1371
 13